

Visual Resource Inventory and Evaluation Southeast Oklahoma Land Use Analysis

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Visual Resource Inventory and Evaluation Southeast Oklahoma Land Use Analysis

United States Department of the Interior
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Introduction

Commercial coal mining began in 1872 in the southeast Oklahoma area with the construction of the Missouri-Kansas-Texas Railroad. Output of coal increased to a high in 1920 of 4.85 million tons. Production decreased to the year 1929 when it experienced a slight climb and then dropped to a low through the depression. World War II increased the demand for coal to an output of 3.5 million tons in 1950. Following World War II coal was replaced by natural gas for heating and power generation and diesel fuel for locomotive power. Recently rising fuel costs have increased the demand for coal to where Oklahoma is producing 2.85 million short tons as of 1975.

The Indians sold certain coal fields to the Federal Government on recommendations by the United States Geological Survey following an extensive survey of the coal fields. With the purchase, the Bureau of Land Management became the administrative body for the federal coal reserves.

Coal is again becoming a desired form of energy which directly influences our quality of life. As a mineral resource, coal is physically removed from the landscape; whereas scenery as a visual resource is physically perceived in what we see and since 87 percent of our perception is based on sight, what we see greatly influences our emotional experiences.

Appearance then becomes a major component to a quality environment which is increasingly important to large segments of the population placing more and more emphasis on aesthetics. Therefore, the characteristic landscape or "visual resource" should be managed to maintain or enhance the scenic quality.

The Bureau of Land Management has outlined a study procedure to inventory and evaluate the scenic quality of the landscape, propose techniques to evaluate impacts and ensure protection, rehabilitation, and enhancement of the visual resource. This method is in keeping with the National Environmental Policy Act of 1969, Executive Order 11514 and the Federal Land Policy and Management Act of 1976 which requires an environmental design arts process to evaluate the environmental quality and impacts associated with a proposed action.

The following study is the initial phase of a continuing inventory system to illustrate and explain the components of visual resources as they are evaluated and analyzed into a final management classification.

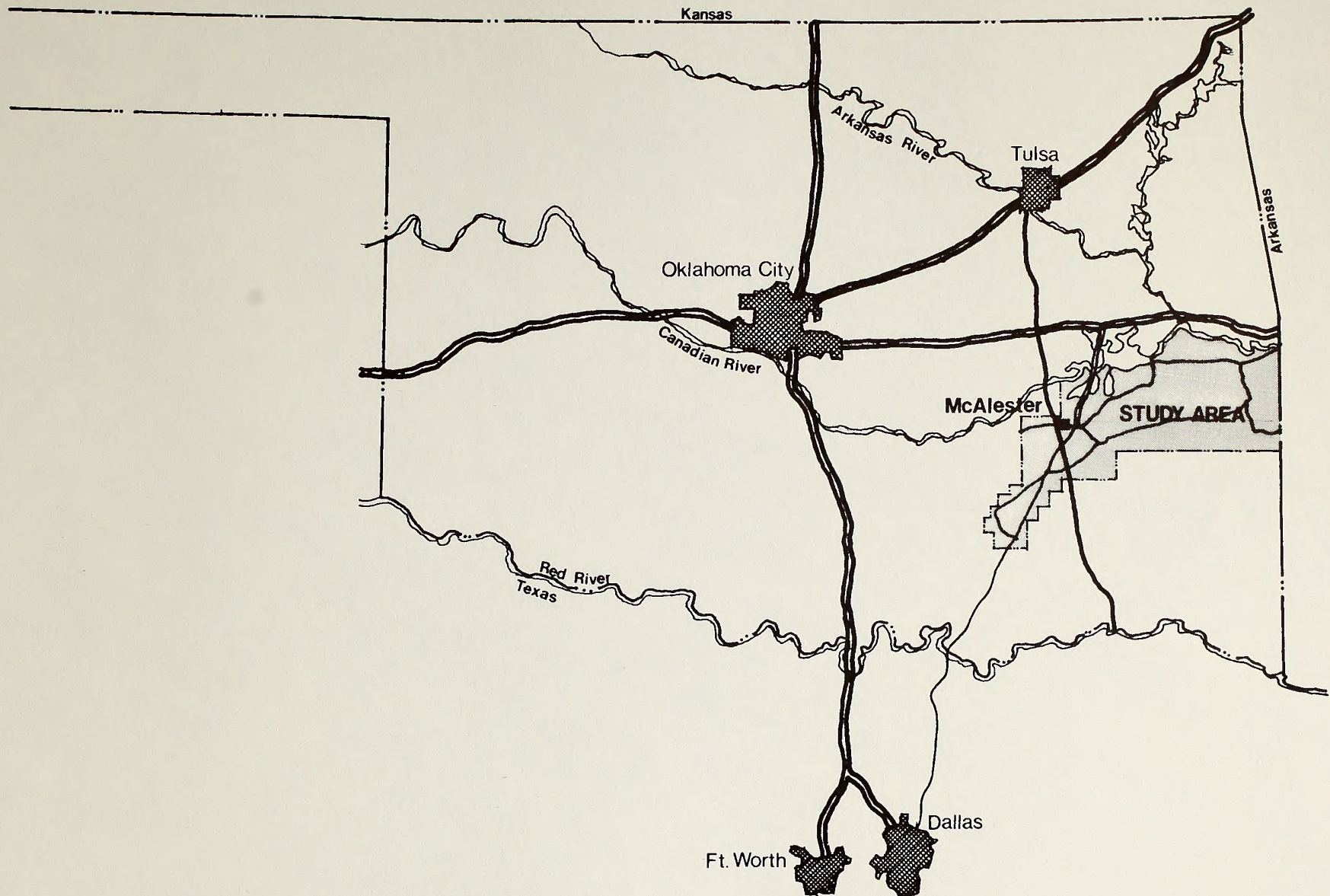
Study Area

The north half of the Southeast Oklahoma Planning Unit within portions of LeFlore, Haskell, Latimer, Pittsburgh, Coal, and Atoka Counties briefly describes the area of study.

McAlester, Oklahoma is on the western edge of the study area - east to the Arkansas state line and north to the Arkansas River. From McAlester - south and west around the small town of Colgate and Atoka, Oklahoma.

The area is centered over federal coal fields and the boundary is determined by the area of observation from previously designated roads covering the coal reserve lands.

Study Area



Study Procedure

The Bureau of Land Management has developed a system to inventory and analyze various components of the landscape and the reactions of individuals and groups who observe and use the land. The system breaks the evaluation into four steps.

Step 1-Scenic Quality Evaluation

The first step is the inventory and evaluation of scenic quality. Evaluation of scenic quality begins with the outline of an area of geographical and aesthetic likeness called a scenic unit. The scenic quality rating unit is evaluated high, medium, or low as to landform, vegetation, water, color, influence of adjacent scenery, scarcity of features within the unit, and cultural modifications on the landscape. A numerical value is placed on each factor giving the unit a quantitative total and placing the scenic unit in either an A, B, or C scenery classification.

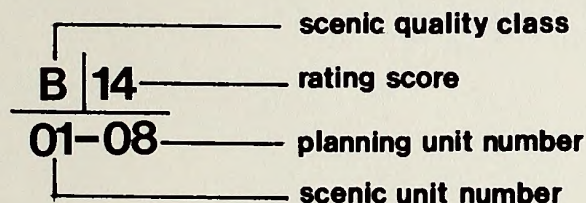
Scenic Quality Rating Schedule

A • 19 - above

B • 12 18

C • 0 11

Scenic Quality Identification



SCENIC QUALITY RATING FORM

- 1 Basic Planning Information
- 2 Narrative of Basic Elements
- 3 Rating of Landscape Features
- 4 Photo of Scenic Unit determining characteristic

Scenic Quality Inventory

The Bureau of Land Management Visual Resource Analysis The Environmental Associates Planners

1	District _____		Area _____		Planning Unit _____	
	Scenic Unit _____		Photo Reference Color Area _____		Photo _____	
	Location _____		B & W Area _____		Photo _____	
2	Narrative					
	Features	Landform/ Water		Vegetation		Structures
	Form					
	Line					
	Color					
	Texture					
3	Rating	High	Med	Low	Rationale	
	Landform	5	3	1		
	Vegetation	5	3	1		
	Water	5	3	0		
	Color	5	3	1		
	Influence	5	3	0		
	Scarcity	6	2	1		
	Cultural Modification	2	0	-4		
	Sub Total				Total Scenic Quality Level	
	4	Determining Characteristic Photo				
						Area _____ Photo _____
Roll _____ Frame _____						

Step 2 Sensitivity Level Determination

The second step for evaluation is the determination of sensitivity levels. Six criteria are given by the Bureau of Land Management in Manual 6310. Five were determined appropriate for this study.

- (1) Use volume cars and trains
- (2) Use volume trails and rivers
- (3) User association
- (4) Local community attitudes
- (5) The reaction of other governing agencies

These criteria were all weighed, one against the other, by all management personnel involved with the area of study - these weights remaining constant throughout the study area.

Criteria Weighting

	Use volume cars, trains	Use volume trails, rivers	User association	Community attitudes	Other agency use and attitudes	Weight	
						Raw	Adjusted (+1)
Use volume cars, trains		←	←	←	←	4	5
Use volume trails, rivers			↑	↑	↑	0	1
User association				↑	←	2	3
Community attitudes					←	3	4
Other agency use and attitudes						1	2

Example: Community attitudes take precedence over three other criteria (other agency use and attitudes, user associations, and use volume trails and rivers as indicated by the number of arrows pointing towards community attitudes), thus a raw score of 3, adding 1 for the final adjusted score of 4.

Sensitivity Evaluation

Areas of study were isolated into sensitivity units where the weights were attached to either high, medium, or low categories according to field team reactions or volume related to the sensitivity unit. The end result for the sensitivity unit is either high, medium, or low sensitivity level.

Criteria	High	Medium	Low
Use volume cars and trains	200,000 or more visits/yr. or more than 200 vehicles/day (ADT year round)	20,000 to 200,000 visits/yr. or 20 to 200 vehicles/day (ADT year round)	20,000 visits per yr. or less than 20 vehicles/day (ADT year round)
Weight 5			
Use volume - trails, rivers, water bodies	20,000 or more visits/yr.	2000-20,000 visits/yr.	less than 2000 visits/yr.
Weight 1			
User association, primitive areas, observation sites, recreation areas, etc.	Major	Secondary	Minor
Weight 3			
Community relationships and attitudes	Protection of the visual resource is important.		Protection of the visual resource is not important
Weight 4			
Other agency use and planning attitudes.	Major national or regional in scope	Secondary sub-region or state	Minor local
Weight 2			

Step 3-Visual Zone Delineation

The third step is the delineation of visual zones. This means outlining areas seen, or seldom seen, from the various travel routes within the study area. The Foreground/Middleground Zone is between the point of observation and three to five miles away. Background is the land between five and fifteen miles from the point of observation. A third category - Seldom Seen - is defined as that hidden from view from the point of observation or beyond the fifteen mile background zone.

Step 4-Visual Resource Management Class Determination

The fourth step is combining the information in the three previous steps. Certain combinations of scenic quality, sensitivity, and visual zones overlay to form management classes. Example: B Class scenery, high sensitivity in the foreground, is a Class II Visual Resource Management Unit. Whereas, B Class scenic, High sensitivity in the background is a Class III Visual Resource Management Unit.

Matrix

		Sensitivity Levels					
		high		medium		low	
special areas		I	I	I	I	I	I
Scenic Quality	A	II	II	II	II	II	II
	B	II	III	IV	III	IV	IV
	C	III	IV	IV	IV	IV	IV
Visual Zone		fg mg	bg	ss	fg mg	bg	ss

Cultural Modifications

The land around and above the federal coal reserves is not owned or managed by the Bureau of Land Management, only the coal itself is owned by the government. This facilitates the inventory and evaluation of all man-made intrusions along the designated travel routes; therefore, only intrusions directly related to active coal mining will be evaluated and rated in this report.

The drafting of Manual 8410 makes provisions for evaluating intrusions as cultural modifications of either positive or negative affect on the scenic quality. Cultural modifications are evaluated in four areas:

- (1) Type: Landform, vegetation, structure
- (2) Contrast Rating: High, medium, low
- (3) Potential for Rehabilitation, modification, rehabilitation
- (4) Potential for Success: High, medium, low

Rating information along with a verbal description, location, and photograph is compiled on a form (shown at right) and keyed to map locations to give the managing bodies a basis for related decisions as to the type of management activities allowed and type of mitigating measures to employ in order to reduce negative visual impacts.

CULTURAL MODIFICATION INVENTORY AND ASSOCIATED CONTRAST RATING

The Bureau of Land Management Visual Resource Analysis - The Environmental Associates Planners

District _____ (1) Area _____ Planning Unit _____ (2)

Scenic Unit _____ (3) Photo Reference - Color Area _____ Photo _____

Location _____ B & W Area _____ Photo _____

Name of Modification _____ Modification Number _____ (5)

Type (4)	Contrast Rating (6)	Potential for Rehabilitating (7)	Potential for Success (8)
1-Landform 2-Vegetation 3-Structure	H-High M-Medium L-Low	M-Modification E-Elimination	H-Fairly certain contract can be satisfactorily reduced to meet low contrast. M-Difficult to accurately evaluate success, but chances look promising to meet low contrast. L-Probability is low that a change will be made, or success would be limited to meet low contrast.

URA III Data

1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---

Effect on Scenic Quality

Trends

Wh Changing

What is causing change

Photo

Remarks

Area _____ Photo _____ Roll _____ Frame _____

Field Approach

The inventory and analysis of the area itself is performed by no less than three individuals of varied backgrounds and disciplines.

For this particular study an initial aerial Reconnaissance acquainted the field team with the land-form types and locations of various activities within and around the federal coal reserves.

The most important roads for visual identification were outlined by Bureau of Land Management personnel prior to the actual ground level survey. Driving these roads, the field team identified and outlined scenic units, sensitivity units, noted visual zones, photographed and indexed positive and negative cultural modification as well as representative scenery.

Once scenic quality and sensitivity units were mapped and identified, an evaluation was made for each scenic and sensitivity unit using the forms and methods previously described under study procedure.

Report Presentation

This report will separate the study area into five sections:

- (1) Scenic Quality
- (2) Sensitivity Levels
- (3) Visual Zones
- (4) Visual Resource Management Classes
- (5) Cultural Modifications

Each section will have four area maps:

- (1) McAlester-Wilburton Area
- (2) Coalgate Area
- (3) Poteau-Sans Bois Mountains Area
- (4) Stigler-Spiro Area

The sections, such as "Scenic Quality", will describe each scenic unit in the map area and continue this format throughout that section. Similarly with "Sensitivity Levels", each sensitivity unit will be described after each map area. This format will continue until the entire area is illustrated and verbally described through the five sections.

Additional information on the study area is available in the form of 1:125,000 scale map and overlays, black and white photoes, color slides and backup field forms. The data can be obtained at the Bureau of Land Management's Project Office in Oklahoma City, Oklahoma.

Section I

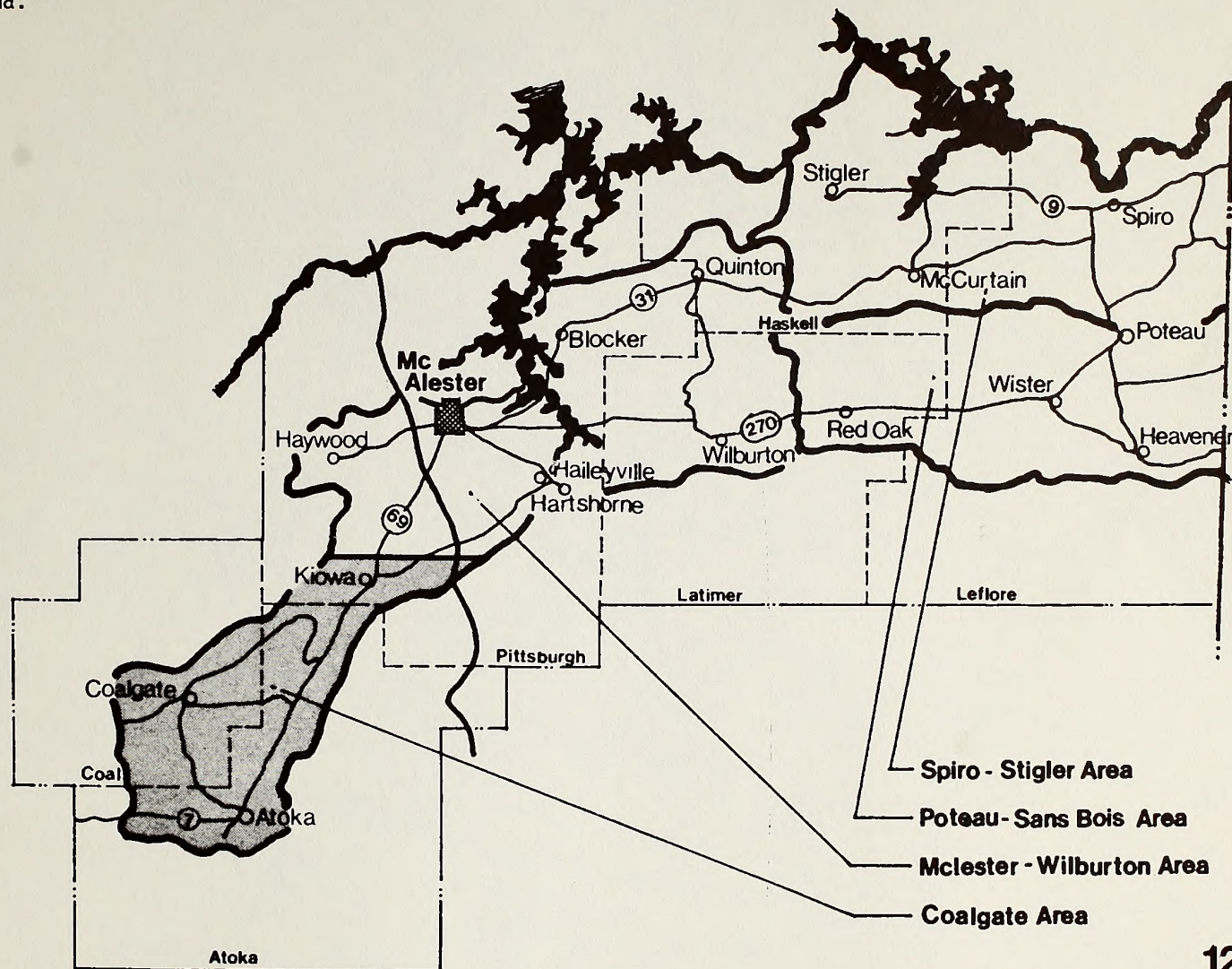
Scenic Quality



Typical countryside south of Coalgate, Oklahoma

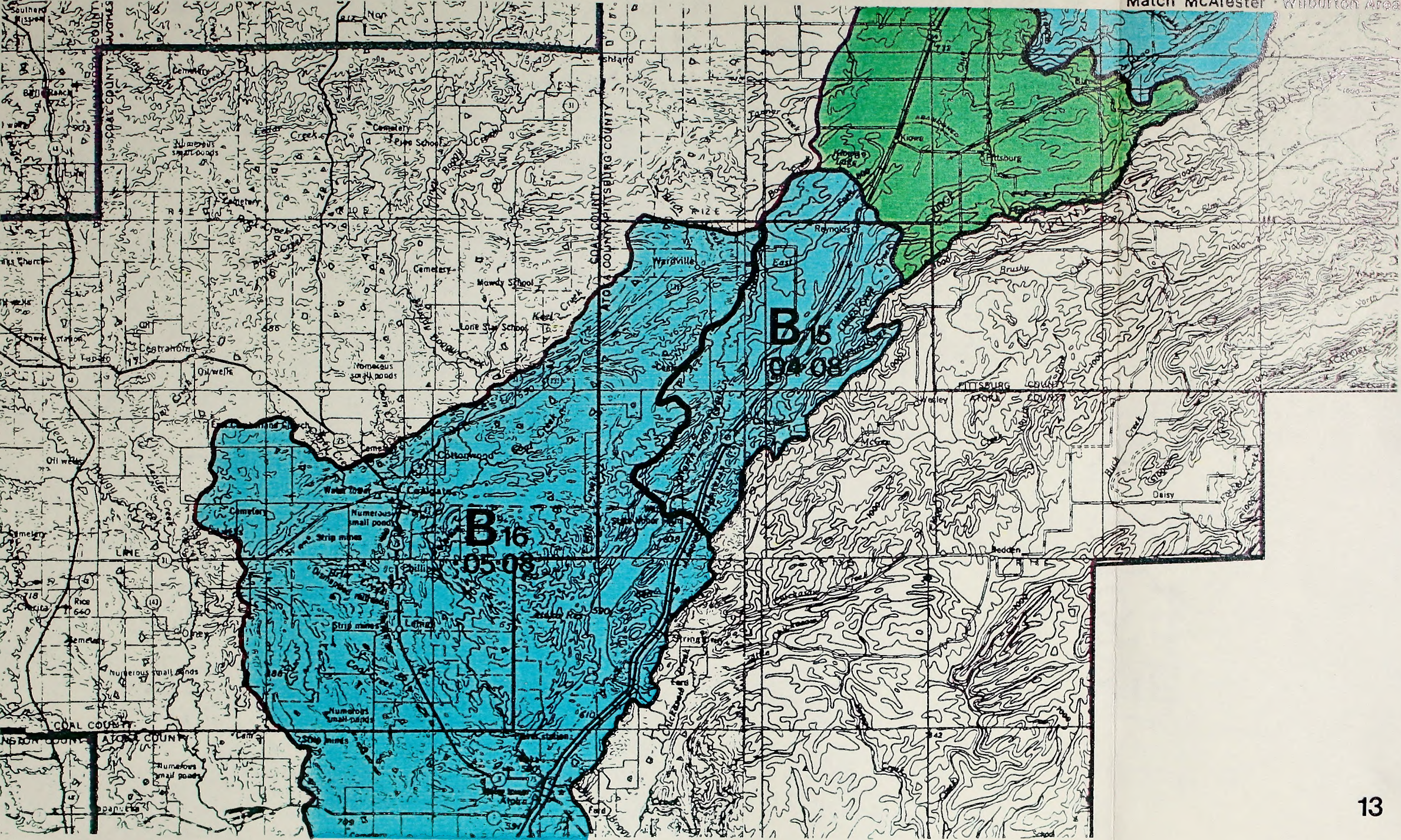
Coalgate Area

The area of study is broken down into four map areas. The first of which is the Coalgate area. The rating area is from Kiowa south to Atoka, Oklahoma, west from Atoka to the Atoka-Coal County line, northwest from Atoka to Coalgate, Coalgate west six miles, east from Coalgate to Atoka Reservoir, north from Coalgate to Wardeville, Oklahoma.



Coalgate Area

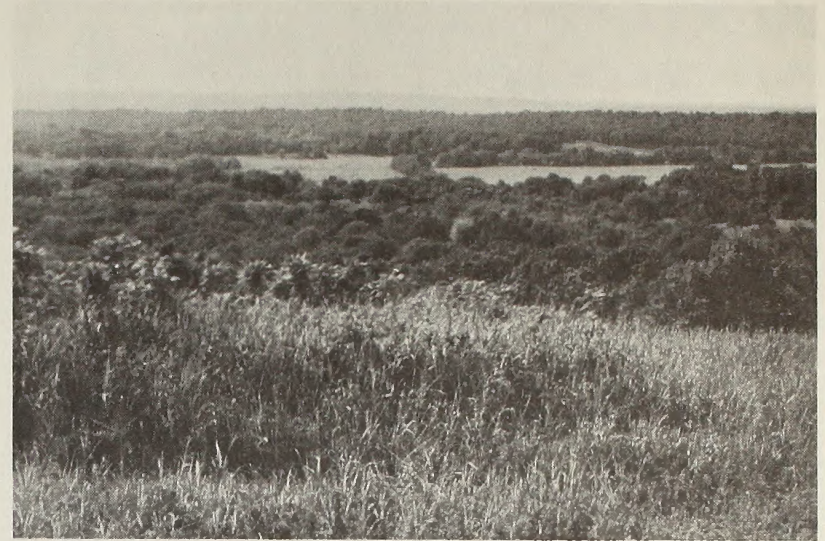
Match McAlester - Wilburton Area



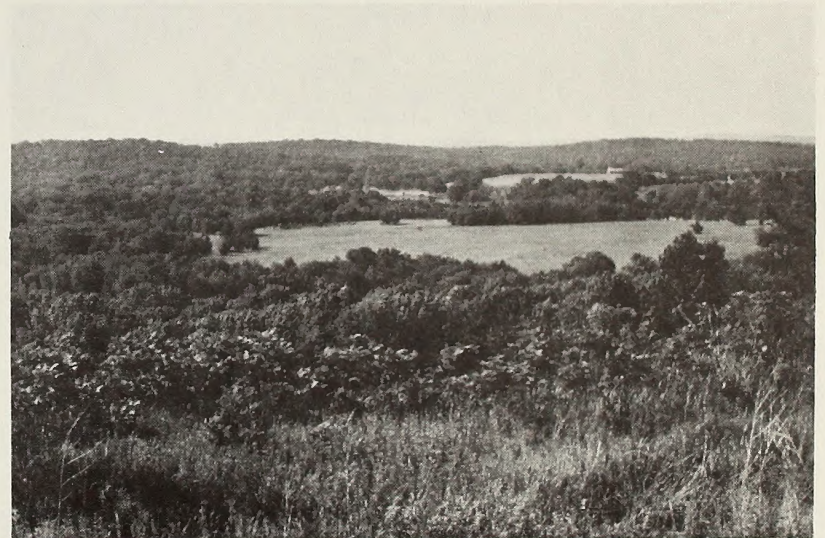
Scenic Unit 04-08

Scenic Quality Class-B

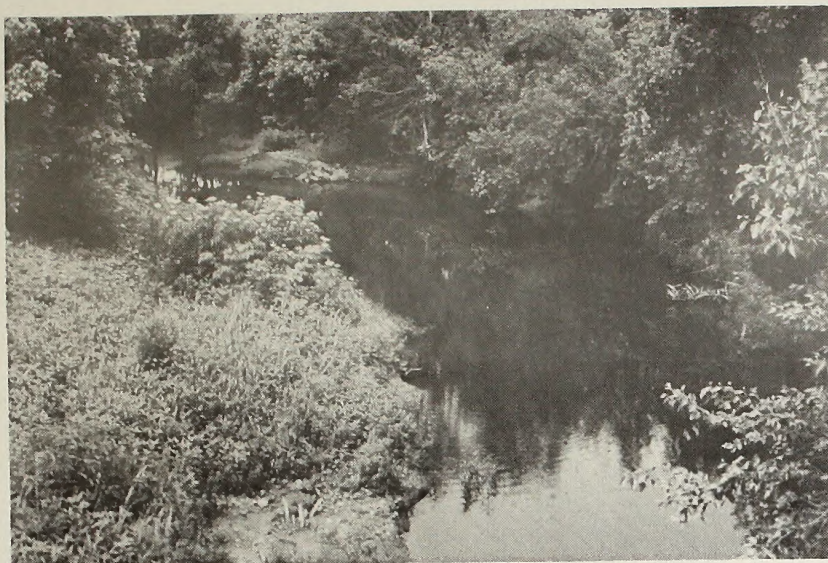
LANDFORM: The variation in landform characteristics results from the rolling hills and small deep cut valleys which are products of the drainages feeding North Boggy Creek.



VEGETATION: A variety of hardwood vegetation consisting of large forested hillsides and small grooves in the bottom land is the dominant form within this unit. Fine and coarse textured trees contrast the open meadows of the pasture lands.



WATER: The drainages of this unit flow to the North Boggy Creek and Buck Creek valleys. The presence of water adds to the scenic quality of the unit but is not a dominant visual feature.

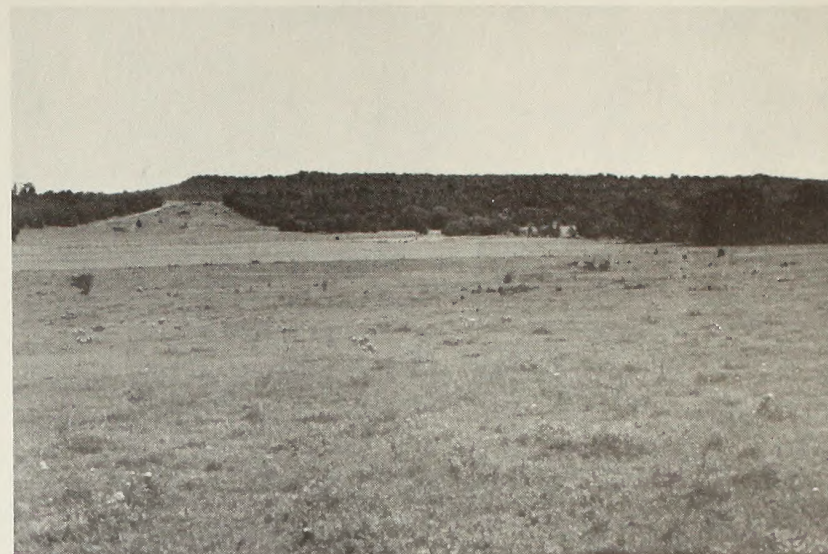


COLOR: The dominant green color of the unit varies in intensity and hue. These variations result in the variety of vegetation within the unit.

INFLUENCE OF ADJACENT SCENERY: Adjacent scenery has no influence on the visual quality of the unit.

SCARCITY: The unit's visual quality is common within the region.

CULTURAL MODIFICATIONS: No land surface alterations from coal and gas production and exploration have negated the scenic quality of the unit.



Scenic Quality Inventory

The Bureau of Land Management Visual Resource Analysis The Environmental Associates Planners

District	Albuquerque	Area	Okla. Proj. Off.	Planning Unit	SE. Oklahoma
Scenic Unit	04-08	Photo Reference	Color Area	Photo	
Location	Hwy 69 So. to Kiowa to Jct. 43	B & W Area	Photo		
	Hwy 131 from 69 to Kiowa Hill				

Narrative			
Features	Landform/ Water	Vegetation	Structures
Form	Small reservoir Small valley Picturesque	Rounded Forms of oak forest	Few structures Small farm houses
Line	Flat, horizontal	Rounded, rolling	Horizontal, homes, sloped roofs
Color	Light green	Deep green trees Lighter green meadows	Mostly white buildings
Texture	Fine	Fine in meadow Coarse in tree cover	Fine texture

Rating	High	Med.	Low	Rationale
Landform	5	(3)	1	Limestone ridge and gap
Vegetation	(5)	3	1	
Water	5	(3)	0	Numerous creeks and ponds
Color	5	(3)	1	
Influence	5	3	(0)	
Scarcity	6	2	(1)	
Cultural Modification	2	(0)	-4	
Sub Total	5	9	1	Total 15 Scenic Quality Level B

Scenic Unit 05-08

Scenic Quality Class-B

LANDFORM: Landforms consist of low rolling foothills and flat valley floors. The variation is interesting but monotonous, lacking detail in the landscape features.



VEGETATION: A rich variety of hardwood trees, thick undergrowth and open grass meadows is the basis of the vegetation rating of the unit. Some juniper and pine are evident near the town of Wardeville adding to the variety of texture and color.

WATER: Numerous creeks and ponds are located throughout the unit. Atoka Reservoir is a large body of water which parallels a portion of Highway 69. These water bodies are numerous but still and are not a dominant factor in the landscape.



COLOR: Variations of green dominate the landscape with slight color variations in the areas of wild flowers. Reflections on the water bodies provide an abrupt change in the color variations of the unit.



INFLUENCE OF ADJACENT SCENERY: Most of the unit is a flat mesa viewing into valley drainages. The adjacent scenery has no influence of the viewsheds within the unit.

SCARCITY: The landscape provides interest but is relatively common within the region.

CULTURAL MODIFICATIONS: Older mines southwest of Coalgate and the large strip mine along Lehigh are evident in their landform along the highways. Natural reclamation in the form of vegetation has partially reclaimed the overburden area and water has filled the pits themselves. Even as the vegetation has turned the overburden green, the sharpness of the landform created from the overburden itself makes the mine area intrusive on the landscape.



Scenic Quality Inventory

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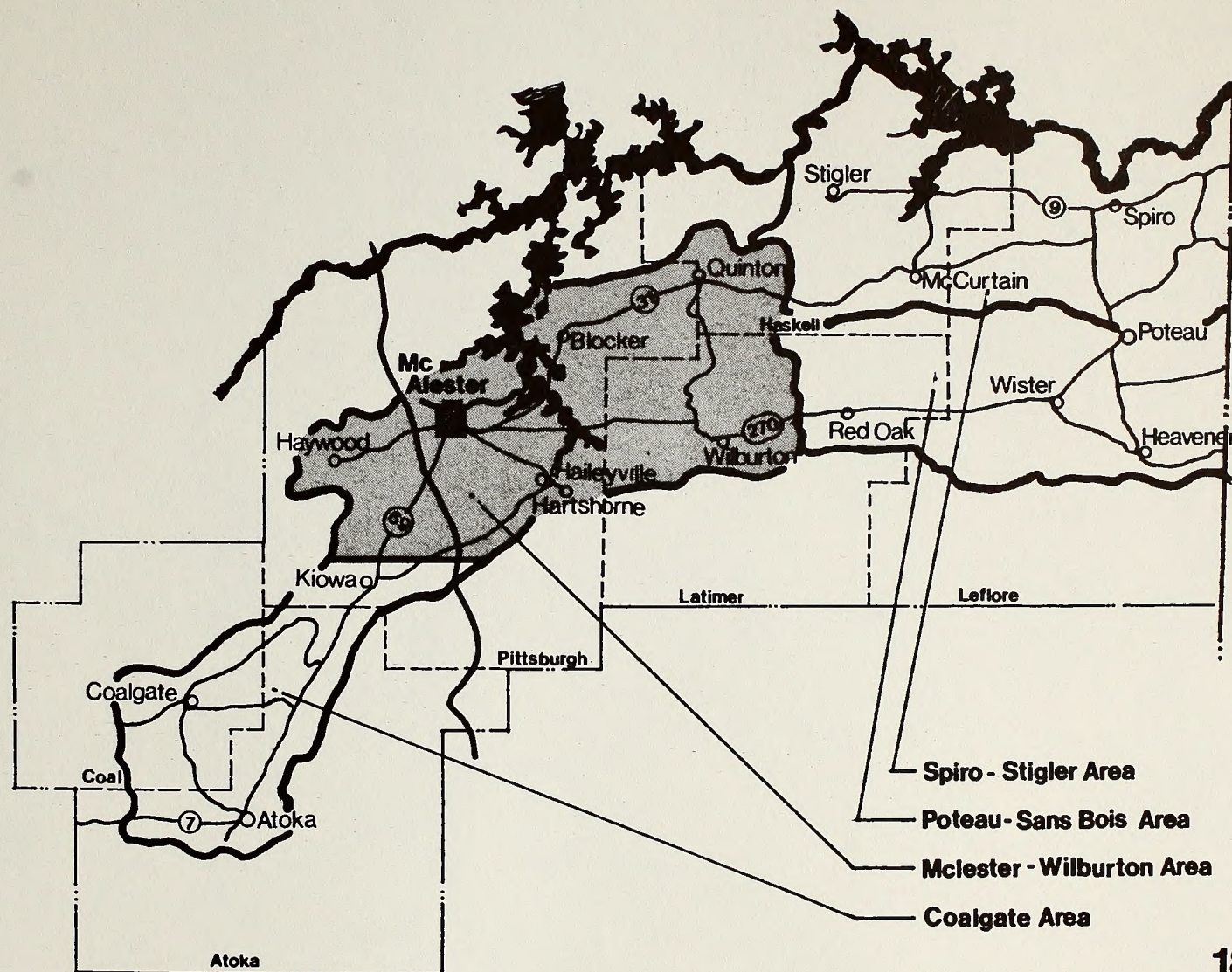
District	Albuquerque	Area	Okla. Proj. Off.	Planning Unit	SE. Oklahoma
Scenic Unit	05-08	Photo Reference	Color Area	Photo	
Location	Hwy 131, 31, 7, 3, 75, 45 around Coalgate	B & W Area	Photo		

Narrative			
Features	Landform/ Water	Vegetation	Structures
Form	Small flats Rolling Hills Strip mines	Farmland, orchards Tree forests Open meadows	Clustered farm and ranch structures
Line	Rolling hills	Vertical due to the great number of trees	Sloped roofs irregular in clusters of structures.
Color	Landform - Light green	Fine in open fields Coarse near trees	White buildings Gray weathered wood barns
Texture	Fine textured	Trees and brush are coarse textured Grasses - fine textured	Coarse due to clustered buildings

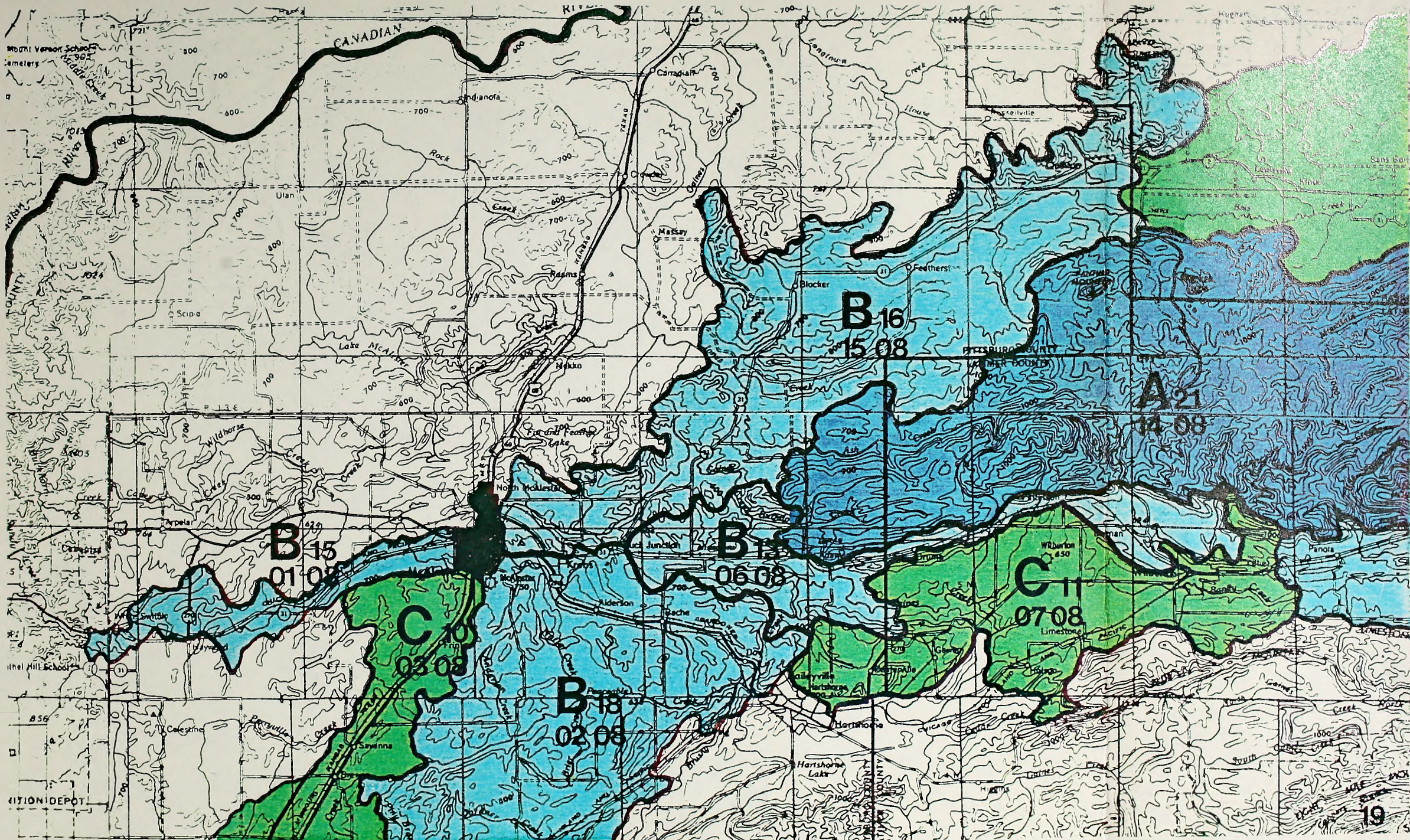
Rating	High	Med.	Low	Rationale
Landform	5	3	(1)	
Vegetation	(5)	3	1	
Water	5	(3)	0	Atoka Reservoir; creeks; ponds
Color	5	(3)	1	
Influence	5	(3)	0	Vistas toward clear Boggy Creek
Scarcity	6	2	(1)	
Cultural Modification	2	(0)	-4	
Sub Total	5	9	2	Total 16 Scenic Quality Level B

McAlester-Wilburton Area

The second map is the McAlester-Wilburton Area. This is an area from McAlester west to Haywood on Highway 31, south near Atoka, east to Hartshorne, Haileyville, Wilburton, Robbers Cave State Park and northeast to Quinton.



McAlester-Wilburton Area



Scenic Unit 01-08

Scenic Quality Class-B

Landform: For approximately five to six miles west from McAlester on Highway 31, the scenery unit is a relatively narrow valley with gentle rolling hills and small drainages crossing perpendicular to the road. Four to five miles east of Haywood the valley is much wider with vistas and large areas of open meadows. The rolling hills confine this portion of the valley.



Vegetation: The hillsides are covered with hardwoods of oak and ash; few conifers are present. The trees grow dense around the small drainages. Vines and undergrowth are thick beneath the trees along the drainages relative to the hillsides. The remainder of the unit is meadow grasses and wild flowers in pastures and ungrazed open areas.



WATER: Water is present in the minor drainages crossing the road. These drainages are muddy brown in color, slow moving, and offer only reflective qualities. The farms and ranches of the area have ponds and small lakes which are clear and reflective.



Color: The color in the unit is 98% in the green range from the vegetation. Wild flowers add color where they occur in masses.

Influence of Adjacent Scenery: There is no adjacent scenery within the confines of the small valley.

Scarcity: All features are common features within the region.

Cultural Modifications: No disturbance of the land surface features related to subsurface mining activity occurring within this scenery unit.

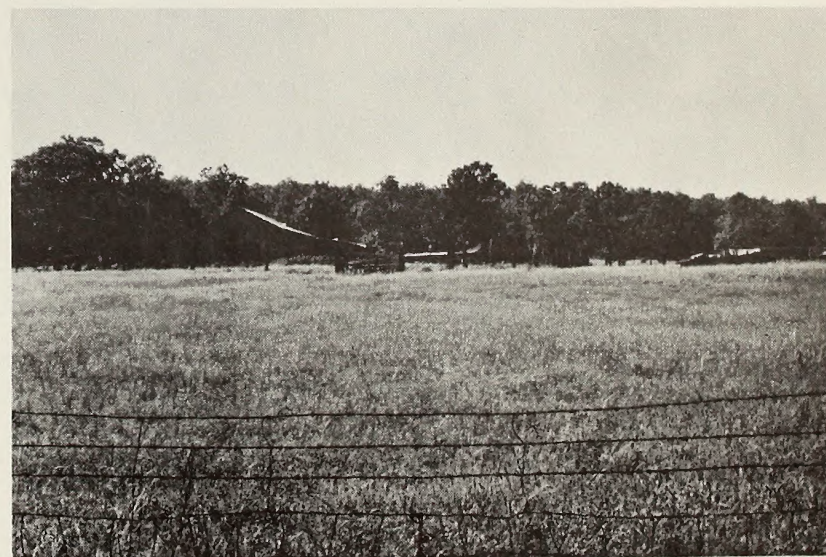
Scenic Quality Inventory

The Bureau of Land Management Visual Resource Analysis The Environmental Associates Planners

District	Albuquerque	Area	Okla. Proj. Off.	Planning Unit	SE, Oklahoma
Scenic Unit	01-08	Photo Reference	Color Area		Photo
Location	Hwy 31 McAlester to Haywood	B & W Area			Photo

Narrative			
Features	Landform/ Water	Vegetation	Structures
Form	Rolling hills Flat valley bottom cut by small drainages	Oval shaped oak trees Thick undergrowth Open meadows	Farms Barns Ranch buildings
Line	Flat, small rounded lines	Rounded from tree groves	Sloped roofs
Color	Green hills from grasses	Rich variation and intensity of greens	Mostly white
Texture	Fine	Varied due to plant species	Fine

Rating	High	Med	Low	Rationale
Landform	5	3	(1)	Subtle, gentle
Vegetation	(5)	3	1	Variety of types, texture
Water	5	(3)	0	Numerous small shaded creeks
Color	5	(3)	1	Mostly in green range
Influence	5	3	(0)	N/A
Scarcity	8	2	(1)	Common in region
Cultural Modification	(2)	0	-4	Barns, ranches, farms
SubTotal	7	6	2	Total 15 Scenic Quality Level 0



Scenic Unit 02-08

Scenic Quality Class-B

LANDFORM: Krebbs to Haileyville along Highway 270 bisects a valley about 300 to 400 yards across the bottom widening farther at Brushy Creek drainage. West of Haileyville along the Brushy Creek drainage the valley again narrows. Rolling hills enclose the valley becoming steep near the narrow valley floor. Between the small towns of Bond and Blanco vistas open to the south and east six to ten miles.



VEGETATION: A dense hardwood forest grows along the Brushy Creek drainage. The larger trees are surrounded by brush and vine cover. The grasses cover the forest floor as well as the open meadows.



WATER: Brushy Creek is a wide, slow moving stream in the middle of the valley itself. Several drainages feed Brushy Creek from the bordering hillsides. The slow moving water allows for the reflection of vegetation and landform on the surface.



COLOR: Green is the predominant color throughout the rating unit. Sparse patches of blue and yellow occur in groups of wildflowers in open areas.

INFLUENCE OF ADJACENT SCENERY: The narrow valley inhibits the influence of adjacent scenery on the rating unit.

SCARCITY: Landform and vegetation are interesting but common within the region.

CULTURAL MODIFICATIONS: No visible land disturbance in this unit due to coal mining activities. A gravel borrow pit and gas well negatively affect the scenic quality in isolated areas but not extensive enough to depreciate the visual quality of the entire unit.

Scenic Quality Inventory

The Bureau of Land Management Visual Resource Analysis The Environmental Associates Planners

District	Albuquerque	Area	Okla. Proj. Off.	Planning Unit	SE Oklahoma
Scenic Unit	02-08	Photo Reference	Color Area	Photo	
Location	Hwy. 270; Hwy. 63 to Wild Horse Creek	B & W Area	Photo		

Narrative			
Features	Landform/ Water	Vegetation	Structures
Form	Narrow drainage Wide flat drainage area	Dense overgrowth	Few old barns
Line	Generally horizontal Occasionally rounded	Dense forest Vertical tree trunks	Horizontal sloped roofs
Color	Green from grass vegetation	Deep greens	Gray sheds and barns
Texture	Fine from grasses	Coarse texture in trees Open meadows Find texture	Fine textured homes Rough textured barns

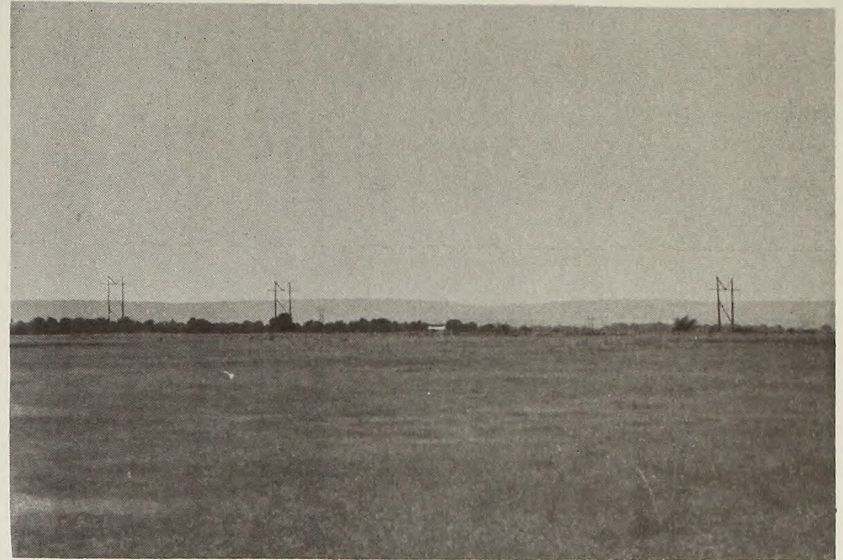
Rating	High	Med	Low	Rationale
Landform	5	3	(1)	
Vegetation	(5)	3	1	
Water	5	(3)	0	Numerous small, shaded creeks; ponds
Color	5	(3)	1	
Influence	5	(3)	0	Vista at Gardner Creek to Pine Mountain
Scarcity	6	2	(1)	
Cultural Modification	(2)	0	-4	Ranches, old barns on Hwy. 63
Sub Total	-7	-9	-2	Total 18 Scenic Quality Level B



Scenic Unit 03-08

Scenic Quality Class-C

LANDFORM: Kiowa to McAlester on Highway 69 is a flat plain area with no visible abrupt change of topographic elevation.



VEGETATION: Trees are confined to minor groves or groups with most of the vegetation in native grasses for grazing livestock. Little variety in form and texture was observed in the two vegetative types.

WATER: Stock watering ponds around the farms and ranches provide the only visible water in the unit.



COLOR: Contrasts between large areas of lime green in the grasses and groups of darker green in the trees provide the only contrasts and color variation.

INFLUENCE OF ADJACENT SCENERY: Only scenery within the designated rating unit can be seen from Highway 69.

CULTURAL MODIFICATIONS: No visual disturbances due to energy exploration were noticeable within this rating unit.



Scenic Quality Inventory

The Bureau of Land Management Visual Resource Analysis The Environmental Associates Planners

District	Albuquerque	Area	Okla. Proj. Off.	Planning Unit	SE. Oklahoma
Scenic Unit	03-08	Photo Reference Color Area		Photo	
Location	Hwy 63 Wild Horse Ck.; Hwy 69 McAlester	B & W Area		Photo	
	to Kiowa	to 3 mi. S. of Kiowa			

Narrative			
Features	Landform/ Water	Vegetation	Structures
Form	Flat basin No topographic change	Open meadows Areas of trees in background	Abandoned mine
Line	Flat	Pleasant relief	Vertical old structures
Color	Light green	Light green Fields - some brown	Gray, white
Texture	Fine textured landform	Fine	Coarse textured barns and old buildings

Rating	High	Med.	Low	Rationale
Landform	5	3	1	
Vegetation	5	3	1	
Water	5	3	0	
Color	5	3	1	
Influence	5	3	0	
Scarcity	8	2	1	
Cultural Modification	2	0	-4	Abandoned deep mine
Sub Total	5	3	2	Total 10 Scenic Quality Level C



Scenic Unit 06-08

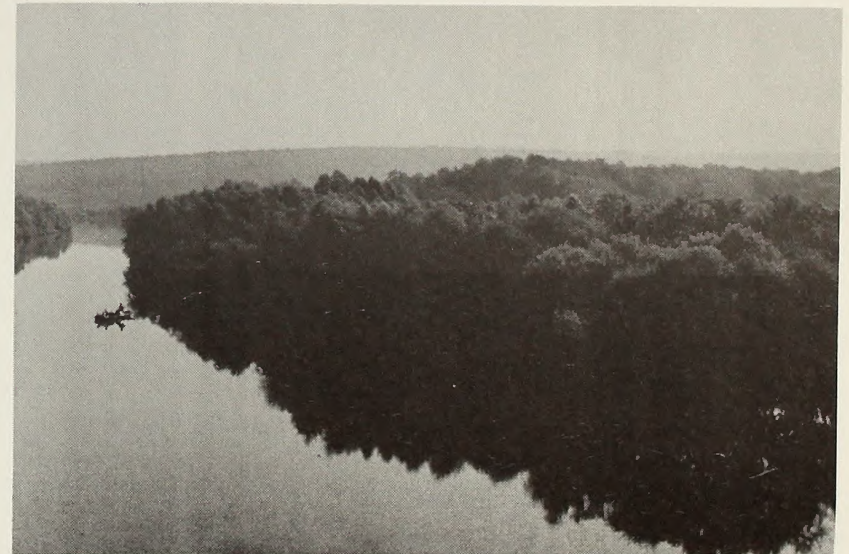
Scenic Quality Class -B

LANDFORM: A narrow valley confined by steep hillsides from the Sans Bois Mountains and Fishback Mountain on the north and south

VEGETATION: Pine on the upper portion of the mountain-side mixes with areas of oak. The oak also mixes with undergrowth in bottoms of the drainages. Grasses cover the open meadows and beneath the larger trees.



WATER: An arm of Eufaula Reservoir extends into the valley from the north. Many small streams and ponds drain through the valley into the reservoir.



COLOR: The dominant color is green in varying shades and intensities due to vegetation.

INFLUENCE OF ADJACENT SCENERY: The Sans Bois Mountains on the north side of the valley are not included in this unit but they confine the valley as a scenic unit, therefore, having a slight influence on the rating of the unit.

SCARCITY: The area within the unit is common to other areas within the region.

CULTURAL MODIFICATIONS: No mining activities due to energy exploration are visible; however, the rating unit is not free from modifications to the natural landscape whether positive or negative.



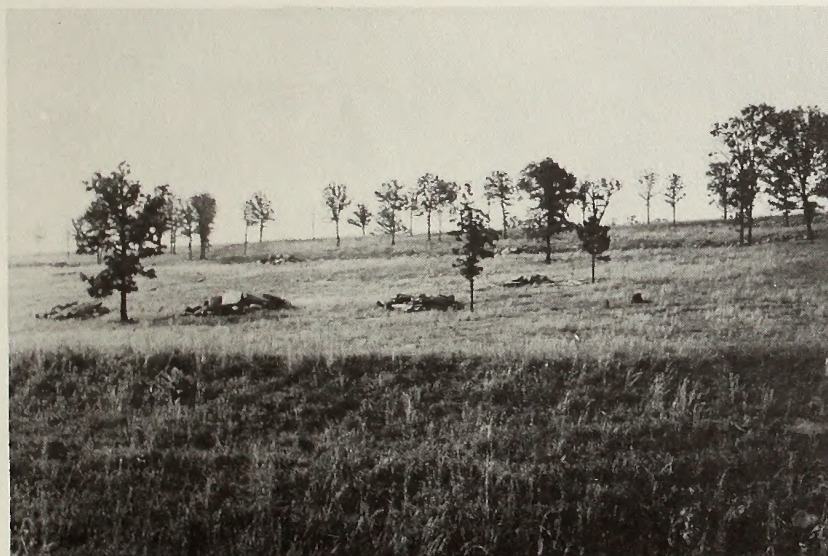
Scenic Quality Inventory

The Bureau of Land Management Visual Resource Analysis The Environmental Associates Planners

District	Albuquerque	Area	Okla.Proj.Off.	Planning Unit	SE. Oklahoma
Scenic Unit	06-08	Photo Reference	Color Area	Photo	
Location	Hwy 31, Krebs - Chili	B & W Area	Photo		

Narrative			
Features	Landform/ Water	Vegetation	Structures
Form	Flat 70 south from base of San Bois Mountains Reservoir visible	Open pasture and farmland	Farms, houses
Line	Horizontal	Rounded tree forms Vertical trunks	Horizontal building forms sloped roofs
Color	Light green	Lighter green in foreground	Mostly white
Texture	Fine textured	Fine	Coarse textured from clustered buildings

Rating	High	Med.	Low	Rationale
Landform	5	3	(1)	
Vegetation	(5)	3	1	
Water	5	(3)	0	Shaded creeks; ponds
Color	5	(3)	1	
Influence	5	3	(0)	
Scarcity	6	2	(1)	
Cultural Modification	2	(0)	-4	
Sub Total	5	6	2	Total 13 Scenic Quality Level B



Scenic Unit 07-08

Scenic Quality Class-C

LANDFORM: The flat valley floor of the Gaines Creek Drainage has little topographic change in elevation between the hills on the north and south side of the valley.



VEGETATION: Very few trees exist; mostly open pasture areas of grasses and wild flowers.

WATER: Water unnoticeable within the unit.

COLOR: Contrasts in color are lacking in this unit. The light green in the pastures varies slightly with the white and yellow in the wild flowers.

INFLUENCE OF ADJACENT SCENERY: The unit is contained by the Sans Bois Mountains on the north and the Blue Mountains on the south which terminate the view shed of the valley floor.

SCARCITY: The main features within the unit are common to other areas in the region.



CULTURAL MODIFICATIONS: Mining and gas exploration do not distract from the visual quality of the unit.

Scenic Quality Inventory

The Bureau of Land Management Visual Resource Analysis The Environmental Associates Planners

District	Albuquerque	Area	Okla. Proj. Off.	Planning Unit	SE. Oklahoma
Scenic Unit	07-08	Photo Reference	Color	Area	Photo
Location	Hwy 31, 270 Chili and Wilburton	B & W Area			Photo

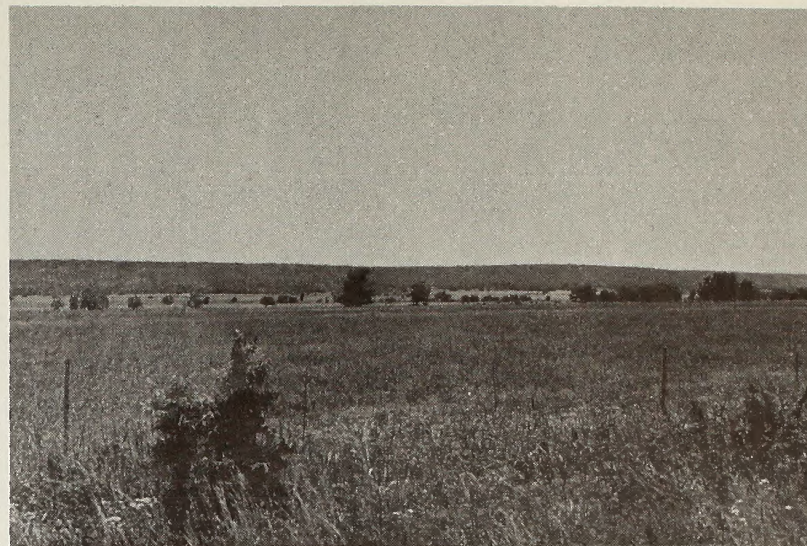
Narrative			
Features	Landform/ Water	Vegetation	Structures
Form	Narrow canyons	Areas of oak and other hardwoods Pine visible on hills	Small towns Railroads
Line	Verical canyons and steep hills	Rounded from dense foilage	Horizontal houses down-town area
Color	Darker green	Varied shades of green	Multi-color area
Texture	Coarse texture	Varied	Coarse from numerous buildings

Rating	High	Med.	Low	Rationale
Landform	5	3	(1)	
Vegetation	5	(3)	1	
Water	5	3	(0)	
Color	5	(3)	1	
Influence	5	(3)	0	Mountains to north
Scarcity	8	2	(1)	
Cultural Modification	2	(0)	-4	
Sub Total	9	2		Total 11 Scenic Quality Level C

Scenic Unit 15-08

Scenic Quality Class -B

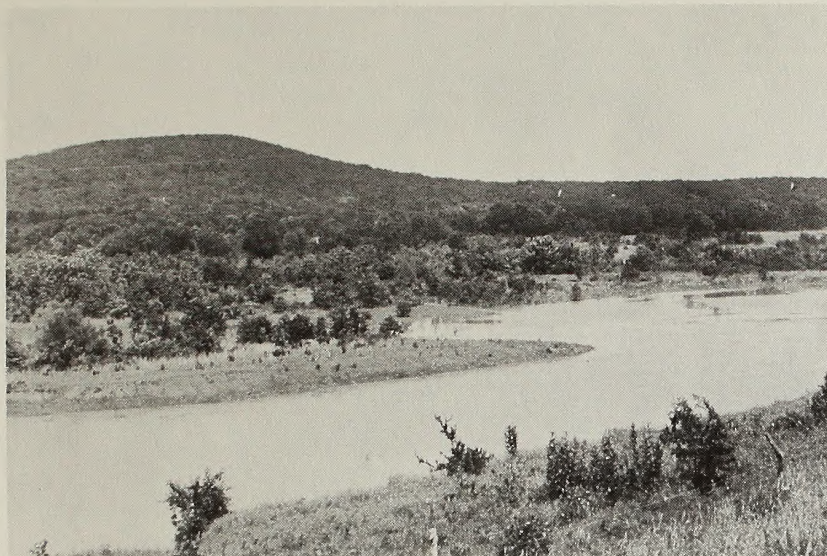
LANDFORM: A wide flat valley floor contained on the north by low rolling hills and the south by the Sans Bois Mountains.



VEGETATION: A wide variety of trees and pasture vegetation is the dominant form within this unit. Trees are mostly hardwoods in large grooves. Pines mix with the conifers on the upper hillsides of the Sans Bois Mountains.



WATER: West and south of Blocker is Eufaula Reservoir. The small drainages flow from the Sans Bois Mountains and the foothills on the north. The creeks and reservoirs are still and not dominant on the landscape.



COLOR: All shades of green are brought about by the rich variety of vegetation. Wildflowers accent the open areas and water provides a pleasant contrast to the green colors.

INFLUENCE OF ADJACENT SCENERY: The Sans Bois Mountains to the east and south and the hills on the north and west form the boundaries of the rating unit and terminate the viewshed.

SCARCITY: The scenery is interesting but not uncommon to the region.

CULTURAL MODIFICATIONS: No visible negative modifications related to energy exploration were observed from the areas of observation.



Scenic Quality Inventory

The Bureau of Land Management Visual Resource Analysis The Environmental Associates Planners

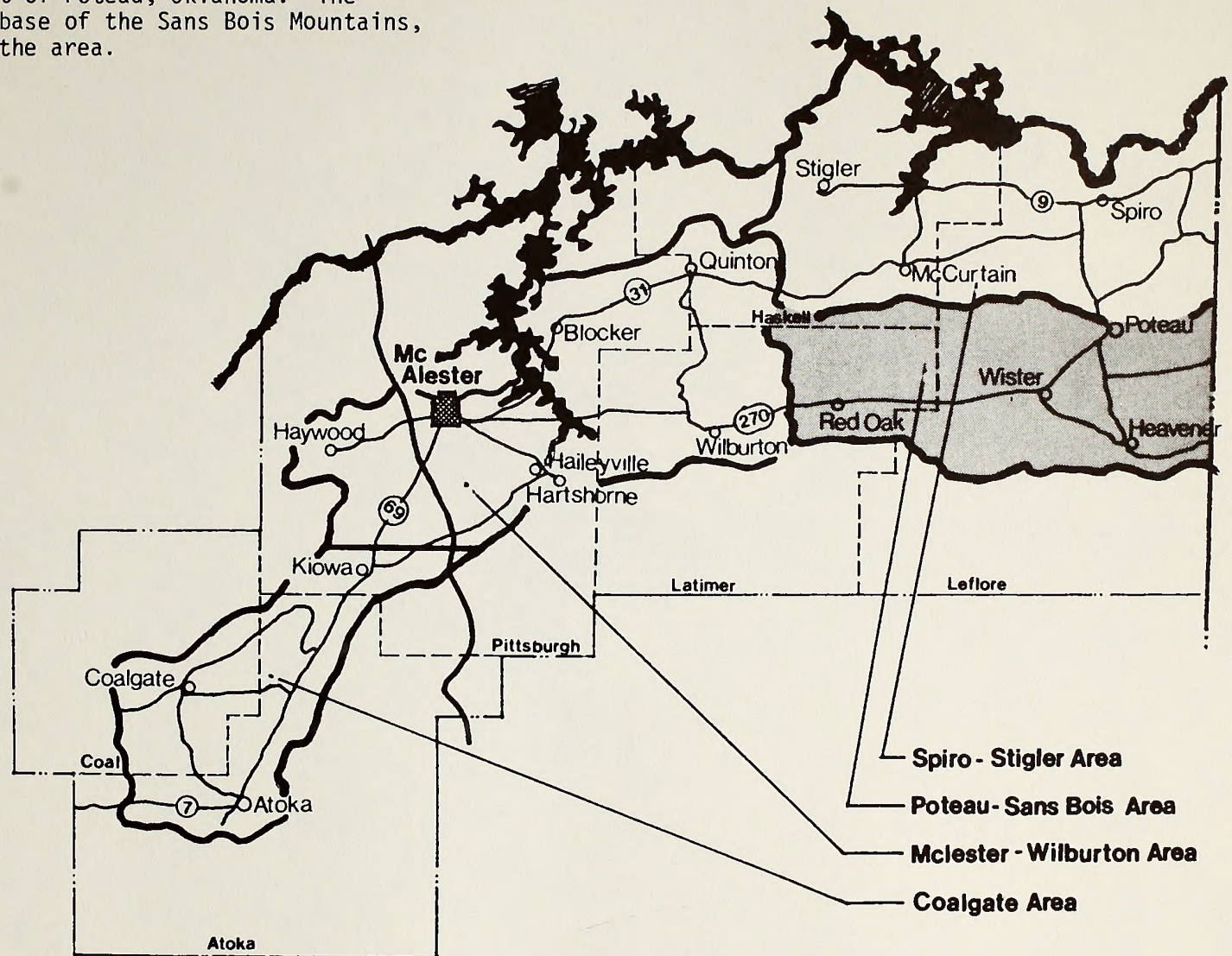
District	Albuquerque	Area	Okl. Proj. Off.	Planning Unit	SE, Oklahoma
Scenic Unit	15-08	Photo Reference	Color Area	Photo	
Location	Quinton, Blocker to Krebs	B & W Area		Photo	

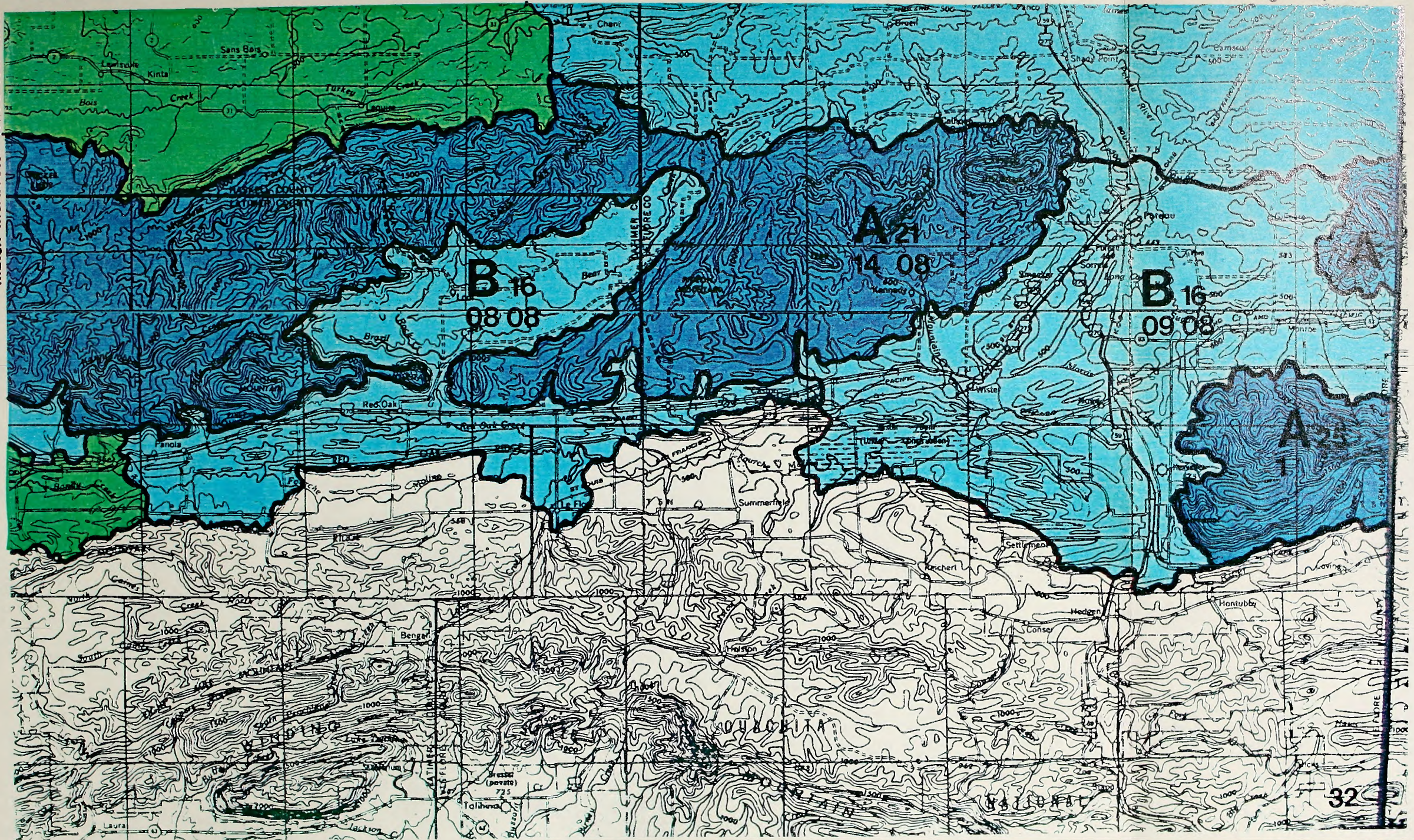
Narrative			
Features	Landform/ Water	Vegetation	Structures
Form	Reservoir - Eufaula Hills Flat valleys Small drainages	Hardwoods Meadows and pasture land	Blocker City Farms and residential areas State beaches on reservoir
Line	Vertical line in hills around reservoir. Horizontal line of reservoir	Rounded from hills and tree groves	Horizontal boxes
Color	Water reflective but brown in color	Constant variation of greens	Usually white Light colors
Texture	Fine in lower valleys Coarse on hillsides	Fine texture in background	Coarse texture

Rating	High	Med	Low	Rationale
Landform	5	3	(1)	
Vegetation	(5)	3	1	
Water	5	(3)	0	Eufaula Reservoir, creeks
Color	5	(3)	1	
Influence	5	(3)	0	Mountains to southeast and hills to north
Scarcity	6	2	(1)	
Cultural Modification	2	(0)	-4	
SubTotal	5	9	2	Total 16 Scenic Quality Level B

Poteau-Sans Bois Area

The third map is the Poteau-Sans Bois Area. The rating area's southwest corner is east of Wilburton, Oklahoma. The south boundary parallels Highway 270 east to Wister. From Wister south and east to Heavener and on to the Arkansas-Oklahoma State line. The east boundary is the state line north to Sugar Loaf Mountain, due east of Poteau, Oklahoma. The North boundary is the base of the Sans Bois Mountains, which are included in the area.





Scenic Unit 08-08

Scenic Quality Class -B

LANDFORM: A narrow, flat valley one to two miles wide on the east end and expanding to five miles on the west end of the unit. The valley is confined by the Sans Bois Mountains on the north and a small hogback, Red Oak Ridge, on the south. North of Red Oak Mountain is a small, flat valley surrounded by the San Bois Mountains. The unit is predominantly flat with the hillsides providing the interest in shape and size.



VEGETATION: Hardwoods and pines grow together along the base of the Sans Bois Mountains. Forests and thick undergrowth grow along the highway and along the valley floors. The large openings of pasture land are covered with thick grasses and wild flowers. These combinations provide a rich variation of vegetation in texture, form, and patterns.

WATER: Slow moving drainages flow south from the Sans Bois Mountains to Red Oak Creek. These streams are narrow and slow moving and overgrown with vegetation making them unnoticeable on the landscape.



COLOR: Patches of color contrasting with the dominant green are attributed to the numerous patches of wild flowers growing along the road and open pastures. Although there is a variety and intensity of green vegetation, it is not the dominant factor in rating the unit.

INFLUENCE OF ADJACENT SCENERY: The rating unit is contained by the Sans Bois Mountains on the north and Red Oak Ridge and Side Mountain on the south. These three landforms adjacent to the scenic unit terminate the viewsheds and provide a basis for the rating unit.

SCARCITY: The unit is interesting within the mountain ranges, but similar within the region.

CULTURAL MODIFICATIONS: No visible landform disturbances due to coal mining and explorations are evident within the unit; however, the area is not free of discordant structures of development created by man.



Scenic Quality Inventory

The Bureau of Land Management · Visual Resource Analysis · The Environmental Associates Planners

District	08-08	Area	Okla. Proj. Off.	Planning Unit	SE, Oklahoma
Scenic Unit	08-08	Photo Reference	Color	Area	Photo
Location	Hwy 270 Wilburton to Fanshawe	B & W Area			Photo

Narrative			
Features	Landform/ Water	Vegetation	Structures
Form	Mountains visible north Narrow canyon prior to Fanshawe	Rounded tree groupings	Sloped roofs, box forms stone buildings
Line	Rolling mountains Narrow valley	Rounded	Horizontal and cluttered
Color	Dark green	Wildflowers added color to the greens of meadows and trees	Multi-colored
Texture	Coarse from vegetative types	Coarse textured oak trees	Coarse textured from clustered buildings

Rating	High	Med.	Low	Rationale
Landform	5	(3)	1	
Vegetation	(5)	3	1	
Water	5	3	(0)	
Color	5	(3)	1	
Influence	5	(3)	0	Mountains to north
Scarcity	6	(2)	1	
Cultural Modification	2	(0)	-4	
Sub Total	5	11	0	Total 16 Scenic Quality Level B



Scenic Unit 09 - 08

Scenic Quality Class - B

LANDFORM: A wide flat valley floor with low rolling terrain enclosed by the east end of the Sans Bois Mountains, the west edge of the Poteau Mountains and the north edge of Winding Stair Mountain.



VEGETATION: Large oak and other varieties of hardwoods combine with pine in the forested areas for a rich variety of major types of vegetation. The open areas are covered with native grasses and small shrubbery adding to the variety in contrast to the large vegetation.

WATER: Wister Reservoir takes up a large portion in area of the rating unit. Tributaries of the Poteau River and the river itself slowly flow through the valley floor. The flatness of the valley and the reservoir make the water motionless and not a totally dominant scenic element.



COLOR: Shades of green provide the main color element. Wister reservoir's large surface area provides a contrast to the green in its reflection of the surrounding landform and sky.

INFLUENCE OF ADJACENT SCENERY: The Sans Bois Mountains, Poteau Mountains, and Winding Stair Mountains enclose most of the unit. The mountains terminate the views within the unit moderately enhancing the scenic quality.

SCARCITY: The rating unit is interesting in respect to vegetation and water but common within the region.

CULTURAL MODIFICATIONS: Operating strip mines around and near Heavener contrast negatively with landform and color. The mines depreciate scenic quality but not totally distracting from the visual landscape of the entire rating unit.



Scenic Quality Inventory

The Bureau of Land Management Visual Resource Analysis The Environmental Associates Planners

District	Albuquerque	Area	Oklahoma	Proj. Off.	Planning Unit	SE, Oklahoma
Scenic Unit	09-08	Photo Reference	Color Area		Photo	
Location	Hwy 70, Fanshawe, Poteau, Heavener, Wister	B & W Area			Photo	

Narrative			
Features	Landform/ Water	Vegetation	Structures
Form	Varied forms Rolling hills Flat valleys Wister Reservoir	Rounded groups of trees	Evidence of mining activity
Line	Rounded hills	Rounded lines from tree areas	Broken lines from cluttered mining area.
Color	Light green from grasses Dark green from groves of trees.	Varied intensities of green	Multi colored confusing
Texture	Mostly coarse from mixture of vegetation	Fine texture in fields A more coarse texture in the woods	Coarse from numerous buildings.

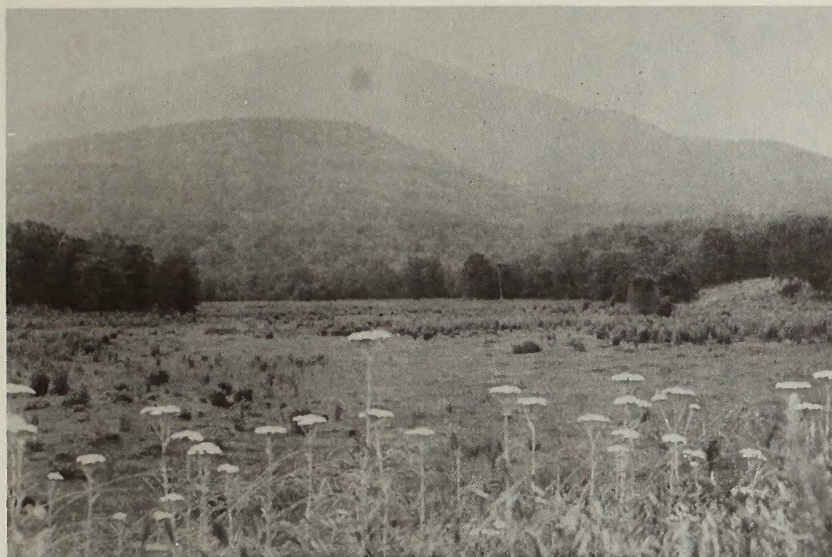
Rating	High	Med.	Low	Rationale
Landform	5	3	①	
Vegetation	⑤	3	1	
Water	5	③	0	Wister Reservoir
Color	5	③	1	
Influence	5	③	0	Mountains to east and to northwest
Scarcity	6	2	①	
Cultural Modification	2	①	-4	
Sub Total	5	9	2	Total 16 Scenic Quality Level B



Scenic Unit 10-08

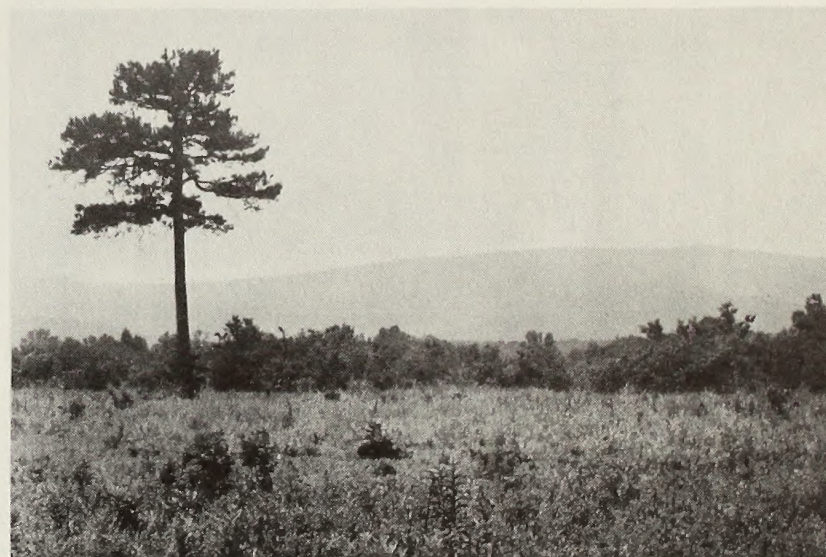
Scenic Quality Class -A

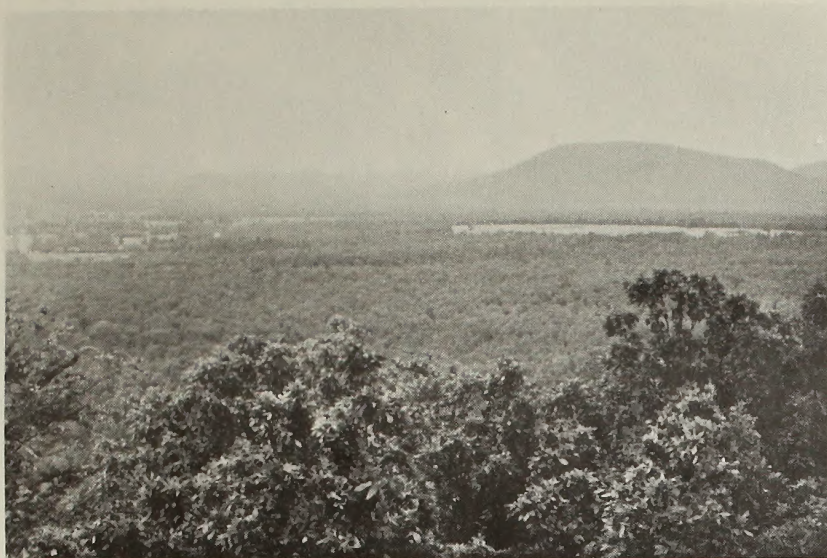
LANDFORM: The Poteau Mountains and Sugar Loaf Mountains reach an altitude of 1,500 feet to 2,500 feet in elevation. Rounded in form, the mountains contrast dramatically to the dominant flat landform. The deeply cut drainages and narrow valleys attribute to the variety of landform in the unit.



VEGETATION: Pine trees are more plentiful and mix dominantly with hardwood forests on the higher mountain hillsides. The undergrowth is very thick and brushy on the hills and along the drainages. The open areas are native grasses and wild flowers common throughout the region.

WATER: The various small drainages and the larger Poteau River flow slowly. The rivers and streams are noticeable but do not dominate the landscape.





Scenic Quality Inventory

The Bureau of Land Management Visual Resource Analysis The Environmental Associates Planners

District	Albuquerque	Area	Okla. Proj. Off.	Planning Unit	SE. Oklahoma
Scenic Unit	10-08	Photo Reference	Color	Area	Photo
Location	Hwy 28 Heavener to Arkansas border	B & W Area		Photo	

Narrative			
Features	Landform/ Water	Vegetation	Structures
Form	Most abrupt landform change. Elevation change is greater on Sugarloaf and Heavener	Rounded tree crowns Vertical trunks	State Park Rhunestone (well done)
Line	Change in flat and vertical line	Round in line	Mining evidence at Coaldale
Color	Dark green from vegetation	Wildflowers, pines, meadows, hardwoods Rich greens accented by flowers	Gray stone buildings
Texture	Coarse textured	Coarse due to variety of vegetation	Rough texture

Rating	High	Med	Low	Rationale
Landform	(5)	3	1	Mountains dominate region
Vegetation	(5)	3	1	
Water	5	(3)	0	Mountain creeks, springs, seeps
Color	5	(3)	1	Flowers
Influence	5	(3)	0	Vistas to lowlands
Scarcity	(6)	2	1	Most unique mountain environment in planning unit
Cultural Modification	2	(0)	-4	
Sub Total	16	9	0	Total 25 Scenic Quality Level A

COLOR: A dominance of green in the vegetation was so extensive that contrasts are limited to the green range. The limited variety of color lessened its impact on the viewshed.

INFLUENCE OF ADJACENT SCENERY: The adjacent scenery does not dominate the viewsheds of the unit but is observed as vistas from observation points on or near the mountains.

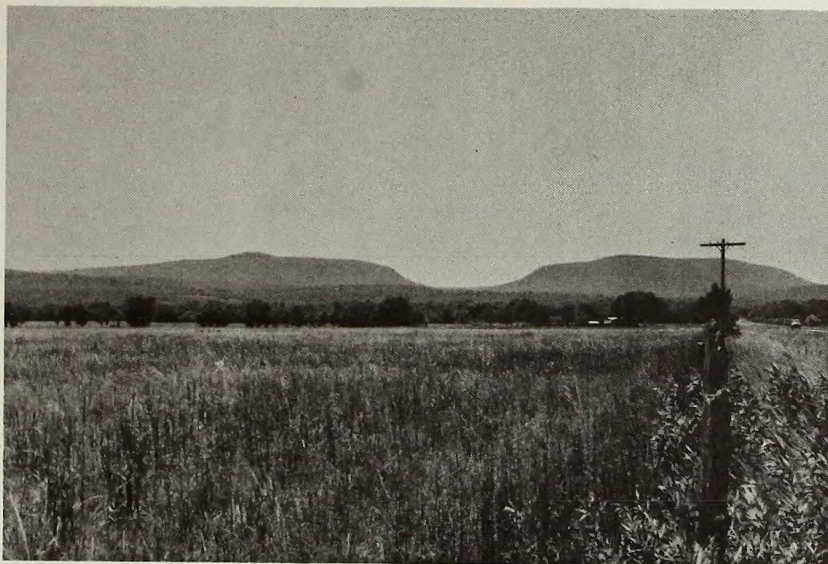
SCARCITY: The Rhunestone Monument is a unique, one of a kind, feature within the region being of serious historical and archeological value. The monument and the dominant mountains of the unit make these items unique within the unit.

CULTURAL MODIFICATIONS: Past and present mining activity is observed from certain points of observation. However, the scenic quality does not seem to be seriously depreciated by the intrusive action.

Scenic Unit 14-08

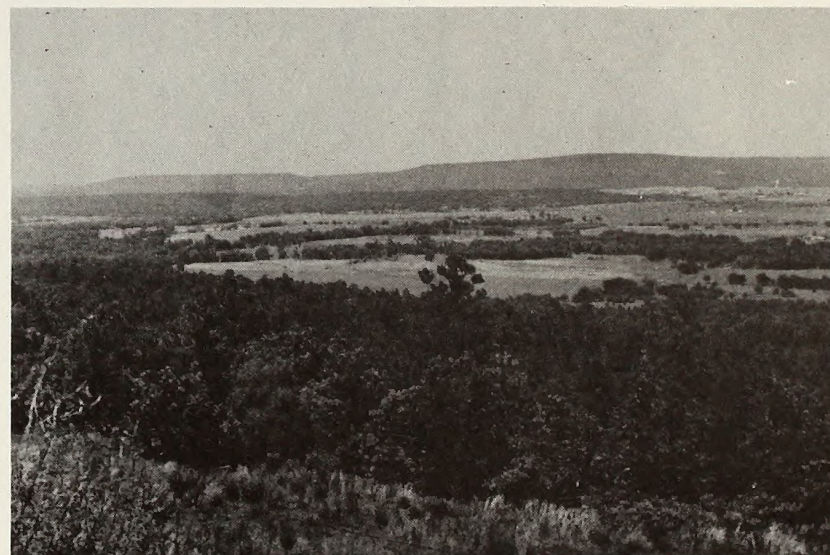
Scenic Quality Class-A

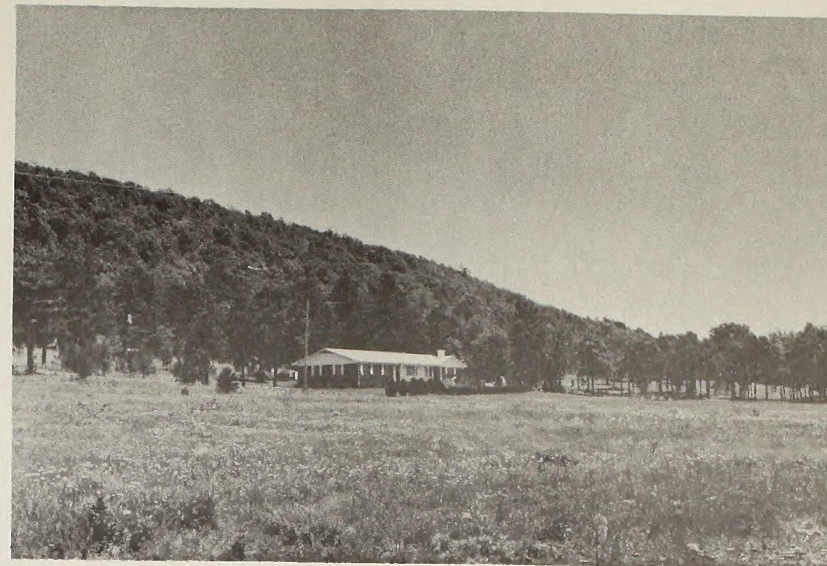
LANDFORM: The Sans Bois Mountains from Cavanal Mountain on the east to Highway 31 on the west are the major portions of the unit. The variation in terrain from steep hillsides, rolling hills, and narrow canyon drainages is characteristic of the mountain like landform of the unit.



VEGETATION: In the foothills and through the mountains themselves, pine becomes a more dominant type of vegetation. The mixture of pine and the various hardwoods and undergrowth provides a rich variety in plant texture and form.

WATER: Water is present and slow moving but not a dominant feature in the visual quality of the unit.





COLOR: A dominance of green in varying intensity and shade is characteristic factor. The lack of contrasting colors make it a constant factor in the landscape and not a dominant element.

INFLUENCE OF ADJACENT SCENERY: The vistas of the adjacent valley floor have a moderate influence on the scenic value of the mountainous unit.

SCARCITY: The key factors form distinctive visual qualities in the viewshed but are similar to the general features of the region.

CULTURAL MODIFICATIONS: Strip mines and energy exploration depreciates the scenic quality, but not to the point where the landscape becomes totally negated by isolated intrusions.

Scenic Quality Inventory

The Bureau of Land Management · Visual Resource Analysis · The Environmental Associates · Planners

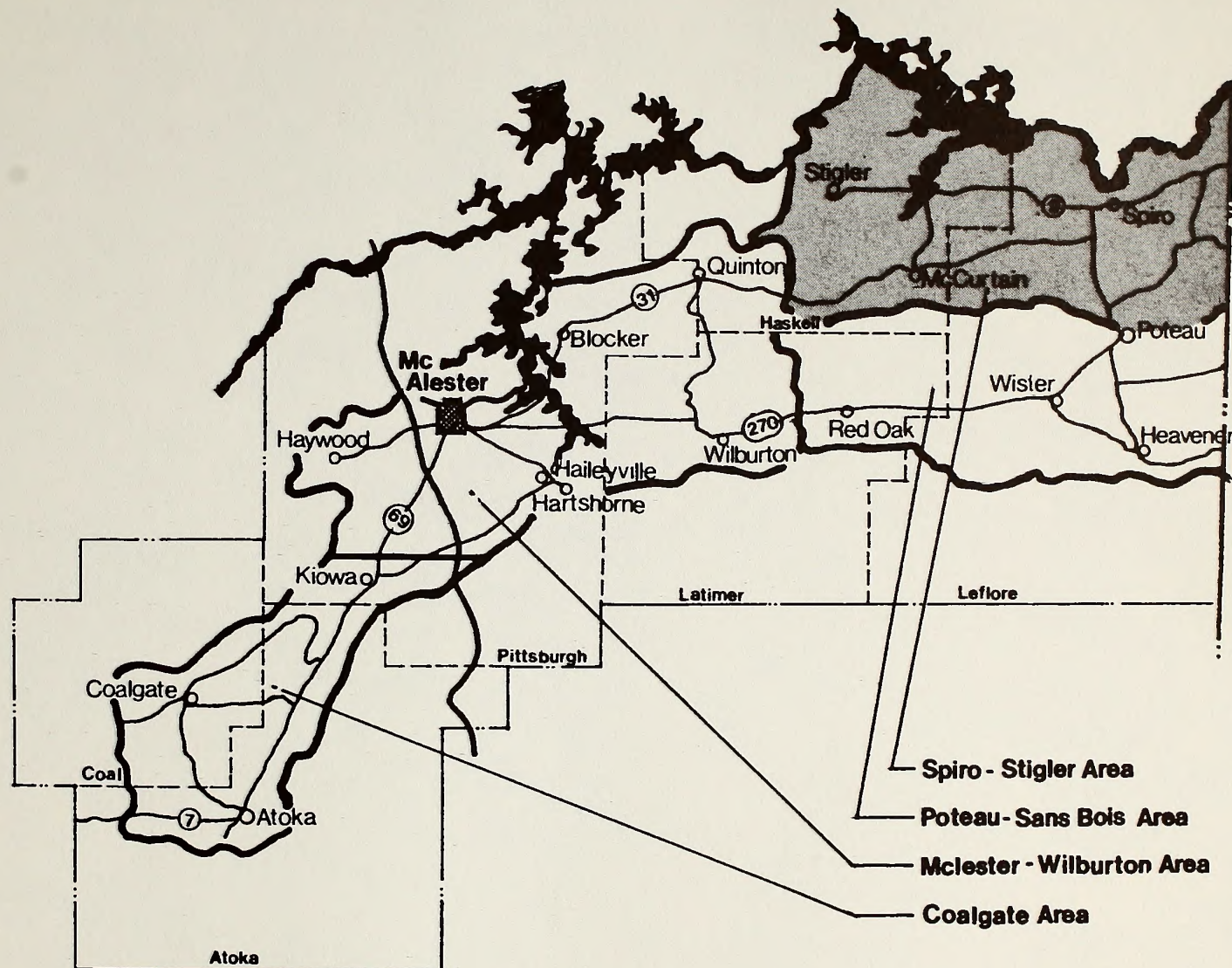
District	Albuquerque	Area	Okla. Proj. Off.	Planning Unit	SE. Oklahoma
Scenic Unit	14-08	Photo Reference	Color	Area	Photo
Location	San Bois Mountains, Robbers Cave	B & W Area			Photo

Narrative			
Features	Landform/ Water	Vegetation	Structures
Form	Vertical landform Vistas seen from north side.	Pine, hardwoods	State Park well done Private residences - Some handled poorly
Line	Vertical line	Vertical from trunk	Car lots Broken horizontal line
Color	Dark green from numerous trees	Darker green	Multi-colored buildings and cars
Texture	Coarse texture from vegetation	Variation in texture due to variation of vegetative types.	Coarse texture

Rating	High	Med.	Low	Rationale
Landform	(5)	3	1	Mountains dominant in region
Vegetation	(5)	3	1	
Water	5	(3)	0	Mountain creeks, springs, seeps
Color	5	(3)	1	
Influence	5	(3)	0	Vistas to lowlands
Scarcity	6	(2)	1	Relative to Scenic Unit 11-08
Cultural Modification	2	(0)	-4	
Sub Total	10	11	0	Total 21 Scenic Quality Level A

Stigler - Spiro Area

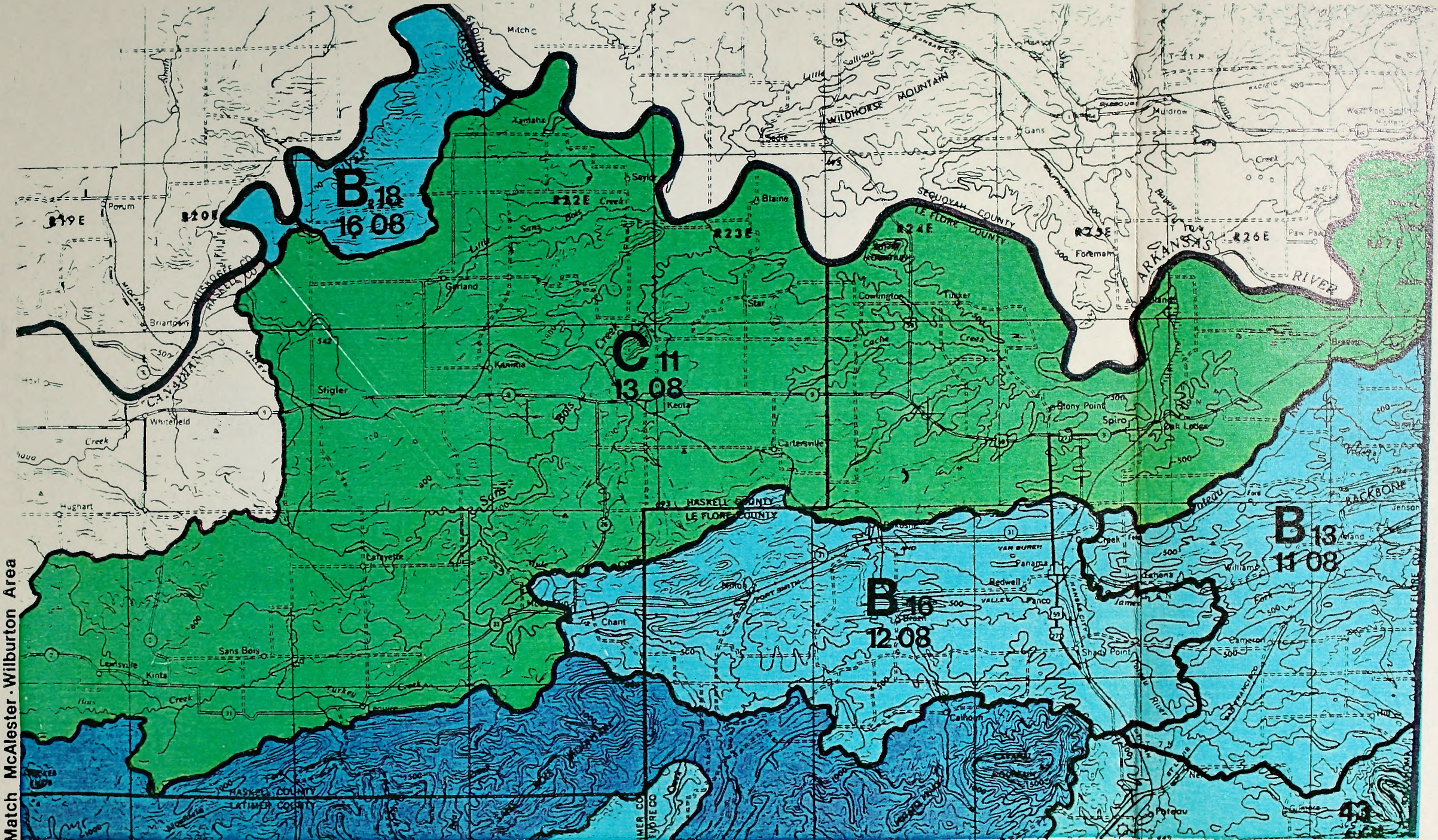
The fourth map is the Spiro-Stigler Area. The east boundary is the Arkansas-Oklahoma State line. The north boundary is the Arkansas River - this boundary ending northwest of Stigler, Oklahoma. The south boundary is the base of the Sans Bois Mountains from Quinton, Oklahoma east to the state line.





The mountain east of Heavner, Oklahoma where the Rhunestone is located.

Stigler · Spiro Area



Match McAlester · Wilburton Area

Match Poteau · Sans Bois Area

Scenic Unit 11-08

Scenic Quality Class - B

LANDFORM: Low rolling hills and ridges are typical between the Poteau River and the Arkansas border. The unit is typified by a repeated series of hills and then broad valley floors and then a series of hills again. The landscape lacks detail which would add interest to the unit.



VEGETATION: The Poteau River drainage area increases the lushness and variety of vegetative types. The trees and undergrowth consist of a variety of vegetative types massed together in form and texture. The trees and undergrowth contrast with the fine texture of the native grasses.

WATER: Crossing the Poteau River near the city of Poteau, the river flows rapidly in relation to the other streams in the region. Further north the river flows slowly - almost still. The river is noticeable only when crossing and other water is noticeable, but is not a dominant feature.



COLOR: Variety in color is limited to that of the contrast of one shade of green to the other. The dominance of only one main color is not a major factor in visual quality.

INFLUENCE OF ADJACENT SCENERY: The adjacent scenery does not play a role in the scenic quality of the unit.

SCARCITY: The unit is common in scenic quality to the surrounding region.

CULTURAL MODIFICATIONS: Mining activity is noticeable at Rock Island and west of Pocola. The Rock Island mine is new and the overburden becomes a detriment to the scenic quality. Near Pocola, the mine is quite old and has been reclaimed by the natural vegetation almost to a point of not being seen at all. Both mines change the natural landform and the color changes dramatically at the newer mine. Though these mines somewhat depreciate the scenic quality, they are not so extensive that the visual quality is negated by their presence.



Scenic Quality Inventory

The Bureau of Land Management Visual Resource Analysis The Environmental Associates Planners

District	Albuquerque	Area	Okl.	Proj. Off.	Planning Unit	SE, Oklahoma
Scenic Unit	11-00	Photo Reference	Color Area		Photo	
Location	Pocola, Rock Island, Spiro	B & W Area			Photo	

Narrative			
Features	Landform/ Water	Vegetation	Structures
Form	Wide flat valley Landforms small Mounds and hills adding interest	Flat grasses Clumps of trees	Evidence of old strip mines Mostly reclaimed
Line	Horizontal Little vertical	Wide vistas	Horizontal farm buildings
Color	Poteau River	Rich greens Wild flowers Long vistas of color	Usually white
Texture	Fine	Fine	Coarse clusters of buildings.

Rating	High	Med.	Low	Rationale
Landform	5	3	(1)	
Vegetation	(5)	3	1	
Water	5	(3)	0	Poteau River; shaded creeks
Color	5	(3)	1	
Influence	5	3	(0)	
Scarcity	8	2	(1)	
Cultural Modification	2	(0)	-4	
SubTotal	5	6	2	Total 13 Scenic Quality Level B

Scenic Unit 12-08

Scenic Quality Class -B

LANDFORM: A gentle rolling terrain, low hills and flat narrow valleys characterize the foothills on the northern side of the Sans Bois Mountains.



VEGETATION: A rich variety of vegetative types in hardwoods, pines, thick undergrowth, grasses and wild flowers. The mixture of these plants combine to form variations in form and texture along the drainage and contrast with the open grassy areas of the hillsides and valley floors.

WATER: Water in the valley floor is smooth and flows slowly and is diverted into many small watering ponds. The presence of water is felt and seen on occasion but is not a dominant factor in the landscape.

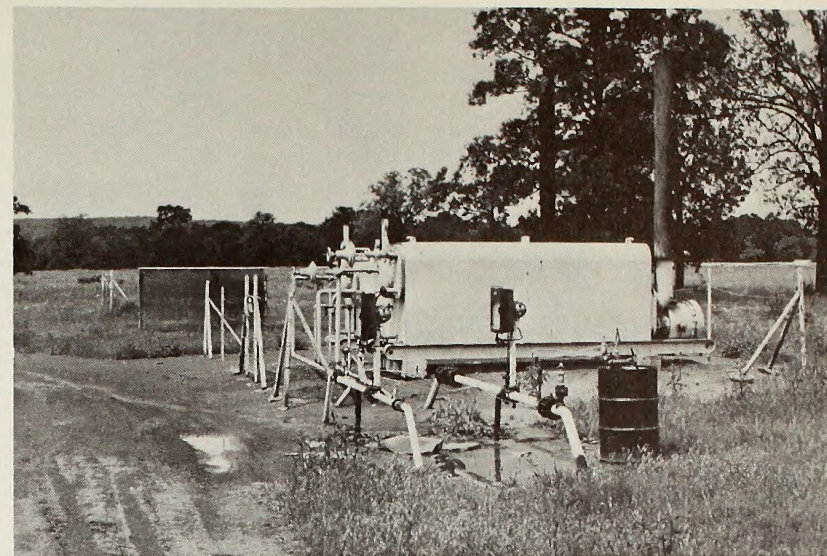
COLOR: Constant shades of green contrasts with small groups of colorful wild flowers create points of interest within the landscape.



INFLUENCE OF ADJACENT SCENERY: The presence of the mountains to the south influence the overall vistas from various vantage points within the rating unit adding moderately to the scenic quality.

SCARCITY: The rolling terrain of the rating unit adds interest to the scenic quality but is a common feature of the region.

CULTURAL MODIFICATIONS: Two presently active strip mine operations are located within the unit - one located north of McCurtain, the other at Bokoshe. These two activities have detracted from the landscape, but only in the immediate area of the operation itself. As a rating unit, the activity only affects a minor portion of the visual landscape.



Scenic Quality Inventory

The Bureau of Land Management Visual Resource Analysis The Environmental Associates Planners

District	Albuquerque	Area	Oklahoma	Planning Unit	SE, Oklahoma
Scenic Unit	12-08	Photo Reference	Color	Area	Photo
Location	Panama, Bokoshe, Bedwell, McCurtain	B & W Area			Photo

Narrative			
Features	Landform/ Water	Vegetation	Structures
Form	Mountains to south Wide valleys Small hill areas	Rounded in forested areas	Mining evident in large area around McCurtain
Line	Flat horizontal line Vertical mountains	Rounded line	Abstract lines in structures Horizontal railroads
Color	Darker green from trees	Rich greens	Usually white Coal mines and derricks
Texture	Coarse texture from vegetation	Coarse in small pocket vistas give medium to fine texture	Coarse texture Cluttered

Rating	High	Med	Low	Rationale
Landform	5	3	(1)	
Vegetation	(5)	3	1	
Water	5	(3)	0	Numerous shaded creeks
Color	5	(3)	1	
Influence	5	(3)	0	Mountains to south
Scarcity	6	2	(1)	
Cultural Modification	2	(0)	-4	
SubTotal	5	9	2	Total 16 Scenic Quality Level B

Scenic Unit 13-08

Scenic Quality Class - C

LANDFORM: The unit is made up of mostly flat, open land. Low rolling hills appear near the small drainages which flow north towards the Canadian River.



VEGETATION: The main vegetative type seems to be grasses and some cultivated ground. Clumps of trees are scattered and border the fields, pastures and creeks.

WATER: Water is calm but noticeable in watering ponds and small creeks. The Arkansas and Canadian River, and the Robert S. Kerr Reservoir are large area wise but not a dominant feature of the landscape.



COLOR: There are more light green shades than dark due to vegetation changes. The reservoirs and rivers contrast with the dominant color due to reflections. Added variations in color from water and vegetation add to the landscape but color is not a cominant factor of the scenic quality.

INFLUENCE OF ADJACENT SCENERY: The adjacent scenery does not influence the value of scenic quality.

SCARCITY: The unit is common to others within the region.

CULTURAL MODIFICATIONS: Numerous mines, both old and new, are located throughout this unit. The mines have been, for the most part, naturally reclaimed. The pits are full of water and are utilized as recreation areas. The vegetation has partially reclaimed the overburden hills, however, the abruptness of the landform becomes the major distraction to scenic quality.



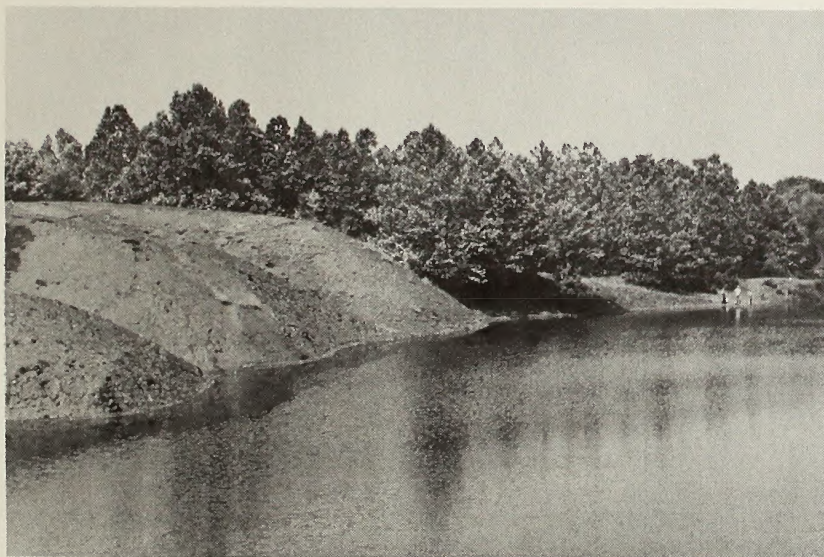
Scenic Quality Inventory

The Bureau of Land Management Visual Resource Analysis The Environmental Associates Planners

District	Albuquerque	Area	Oklahoma	Proj. Off.	Planning Unit	SE. Oklahoma
Scenic Unit	13-08	Photo Reference	Color	Area	Photo	
Location	Spiro, Stigler	B & W Area	Photo			

Narrative			
Features	Landform/ Water	Vegetation	Structures
Form	Flat landscape San Bois Mountains in background. Small drainages. Mining activity noticeable	Fields, pasture Some cultivated	Farm structures - barns sheds Small towns
Line	Horizontal Little topographic variation	Very horizontal Flat	Horizontal Low buildings
Color	Spiro lakes evident from highway	Variation due to cultivated crops	White usually
Texture	Fine texture Numerous grass areas	Fine texture Most fields and pastures cultivated	Medium Large distance between buildings

Rating	High	Med.	Low	Rationale
Landform	5	3	①	
Vegetation	5	③	1	Pasture and grasslands dominant
Water	5	③	0	Kerr Reservoir; Arkansas River; creeks
Color	5	③	1	
Influence	5	3	①	
Scarcity	6	2	①	
Cultural Modification	2	①	-4	
Sub Total	9	2		Total 11 Scenic Quality Level C



Scenic Unit 16-08

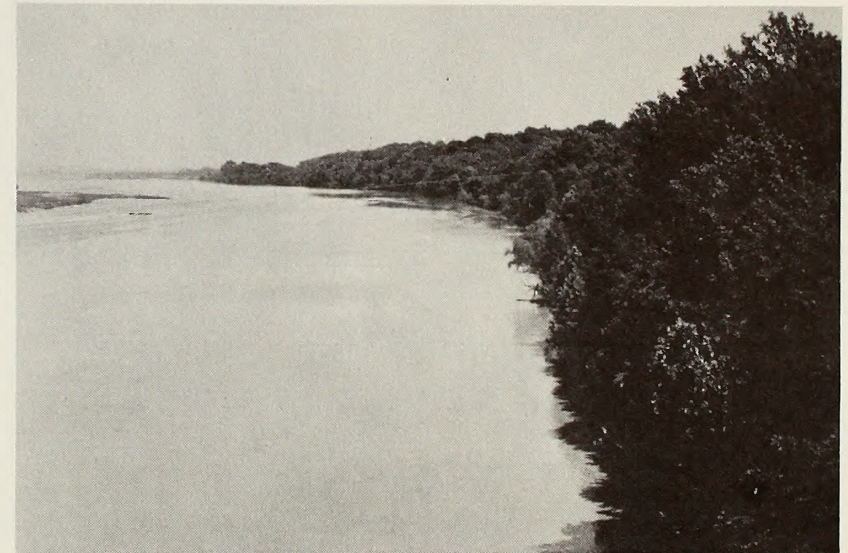
Scenic Quality Class - B

LANDFORM: Steep in vertical topographic relief from Morgan Mountain and accompanying low rolling hills along Canadian River contrasts with the relatively flat terrain south of Morgan Mountain creating variety in size and shape of landform.



VEGETATION: Fine textured riparian types of trees and undergrowth grow along the Canadian River. Hardwoods and typical undergrowth grow in the surrounding hills. The open areas have the native grasses. These different types of vegetation exhibit a wide variety in form and texture.

WATER: The South Canadian River and its confluence with the North Canadian River to form the Arkansas River is a large body of water, but limited in observance from within the unit. The large river and its minor tributaries which cross the unit do not constitute a dominant feature in the landscape.



COLOR: Varying shades of green in the types of vegetation contrast moderately with the mirror like qualities of the water areas adding interest to the unit but not a dominant landscape quality.

INFLUENCE OF ADJACENT SCENERY: The adjacent scenery has no influence on the scenic unit.

SCARCITY: The unit is interesting in landform and vegetation but common within the region.

CULTURAL MODIFICATIONS: There is presently strip mining operations around Morgan Mountain. These mines can be seen from points of higher elevation on and around Morgan Mountain. Although they do alter the earth's surface in landform and color, their intrusion on the landscape does not totally depreciate the scenic quality.

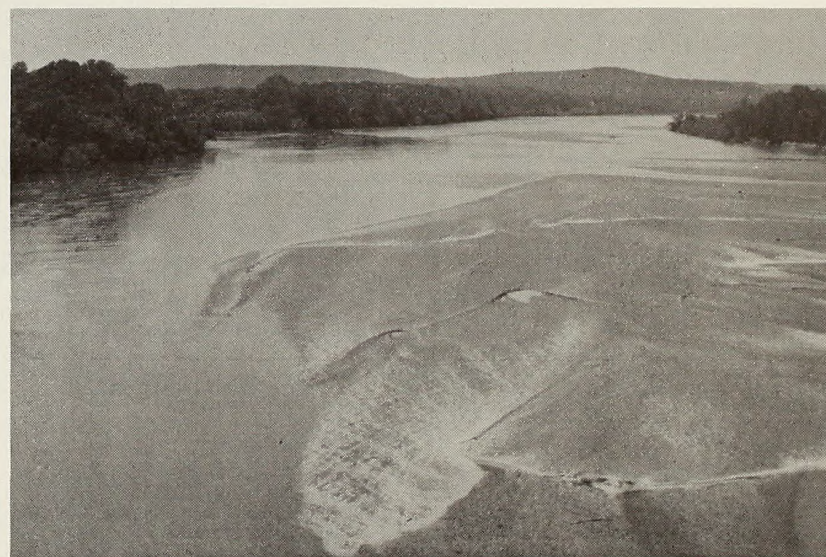
Scenic Quality Inventory

The Bureau of Land Management Visual Resource Analysis The Environmental Associates Planners

District	Albuquerque	Area	Okla. Proj. Off.	Planning Unit	SE Oklahoma
Scenic Unit	16-08	Photo Reference	Color Area	Photo	
Location	Morgan Mountain	B & W Area	Photo		

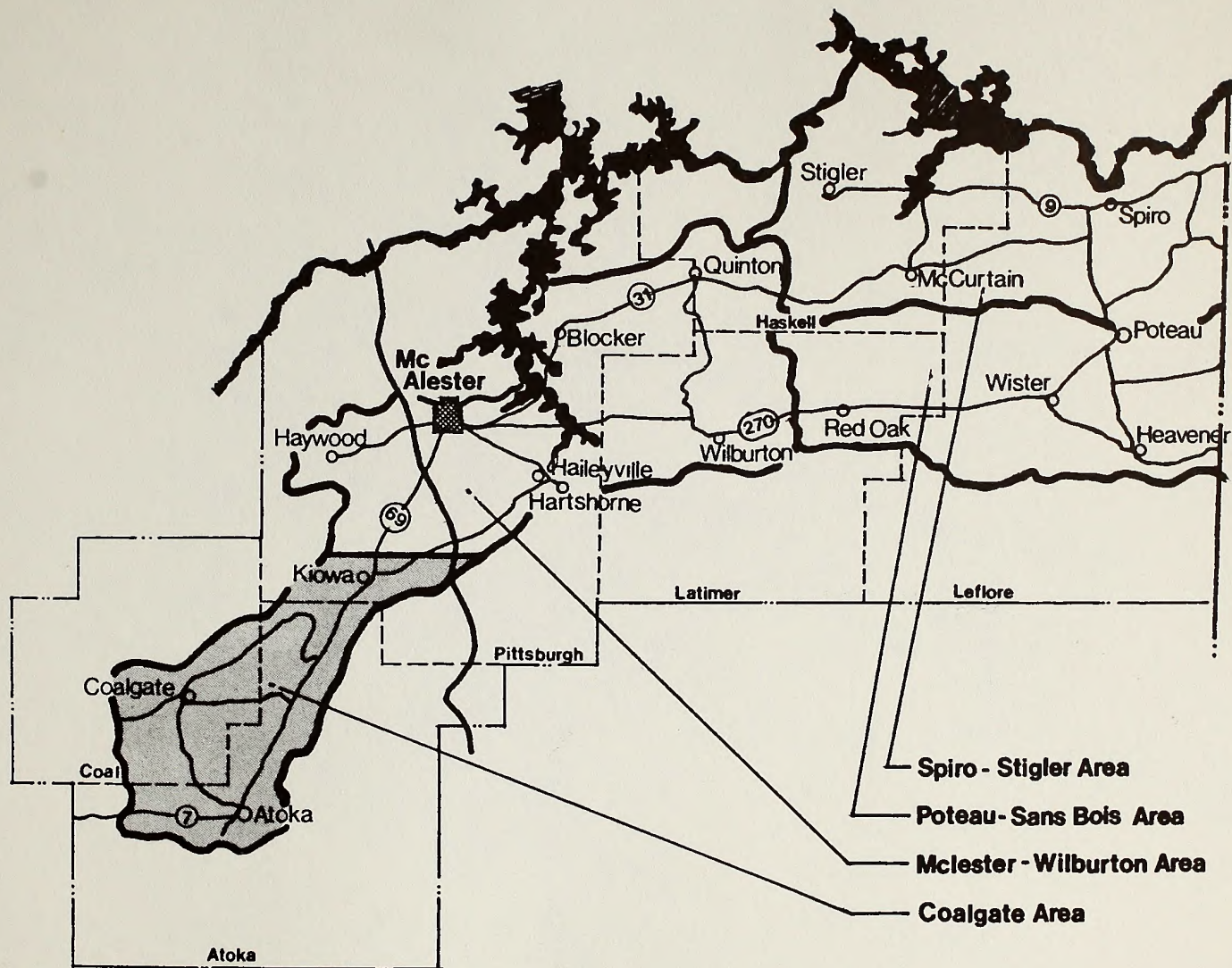
Narrative			
Features	Landform/ Water	Vegetation	Structures
Form	Rounded hill forms	Rounded clumps of trees	Very few structures Small farm houses
Line	Broken vertical and rounded	Rounded from vegetation	Horizontal box like houses
Color	Darker green from vegetation	Darker green	Usually light colored
Texture	Coarse texture	Coarse texture	Fine textured Spread out

Rating	High	Med.	Low	Rationale
Landform	5	(3)	1	Rounded
Vegetation	(5)	3	1	Numerous varieties
Water	5	(3)	0	Coal pits
Color	5	(3)	1	
Influence	5	3	(0)	
Scarcity	8	2	(1)	
Cultural Modification	2	(0)	-4	
SubTotal	5	9	1	Total 18 Scenic Quality Level



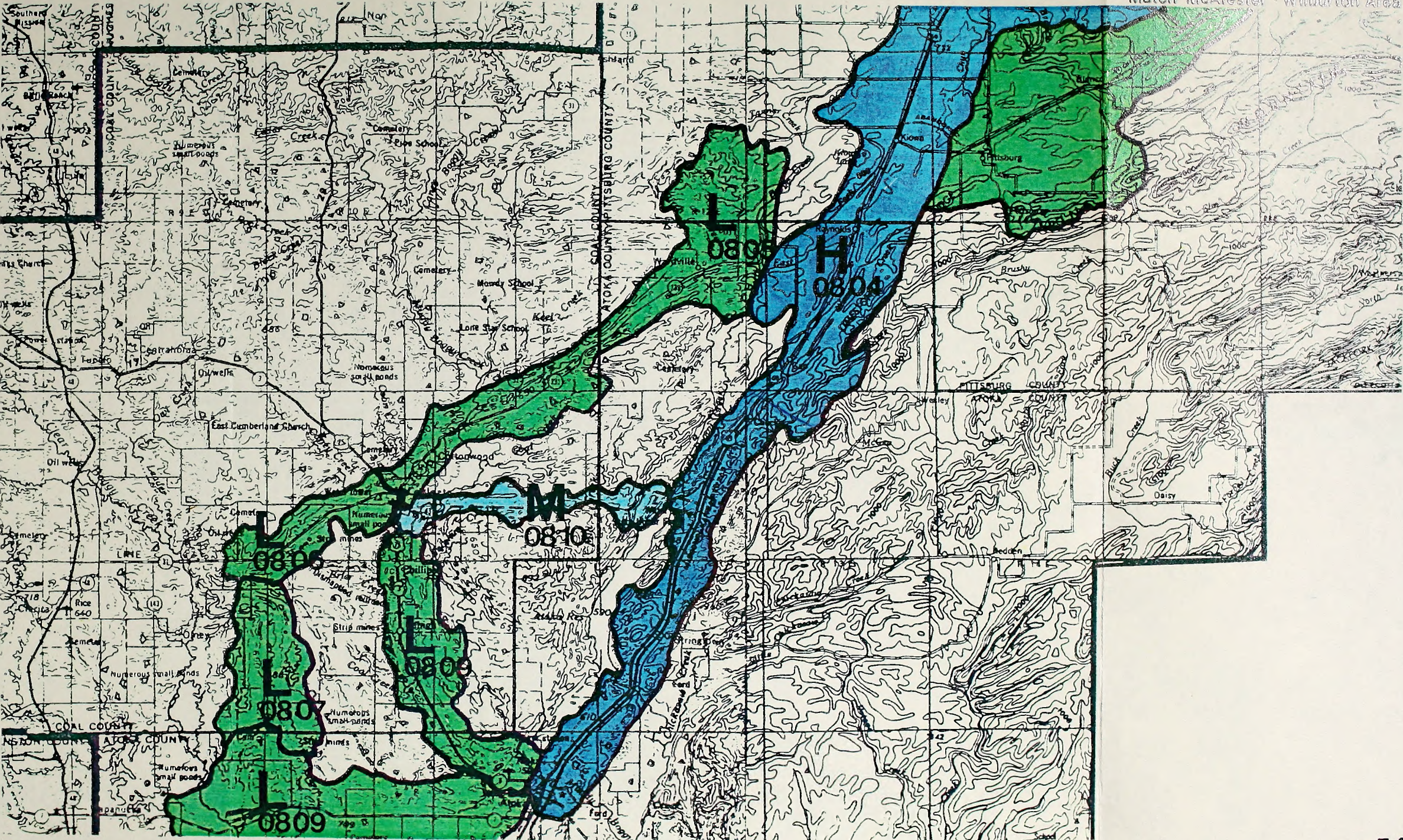
Section II

Sensitivity Levels



Coalgate Area

Match McAlester - Wilburton Area



Sensitivity Unit 08-04

High

The unit is a visual corridor between McAlester and Atoka, Oklahoma.

The volume of car and train traffic reaches 200 vehicles per day.

The volume of people using any trails and rivers in the unit is 2,000 to 20,000 visits per year.

The people using recreation sites, such as Atoka Reservoir, have a major concern for visual change.

To the local community, the protection of the visual resource is important.

Any land use or planning attitudes towards visual change would be generated by the state agencies.

Criteria	High	Medium	Low
Use volume cars and trains	200,000 or more visits/yr. or more than 200 vehicles/day (ADT year round)	20,000 to 200,000 visits/yr. or 20 to 200 vehicles/day (ADT year round)	20,000 visits per yr. or less than 20 vehicles/day (ADT year round)
Weight 5	5		
Use volume - trails, rivers, water bodies	20,000 or more visits/yr.	2000-20,000 visits/yr.	less than 2000 visits/yr.
Weight 1		1	
User association, primitive areas, observation sites, recreation areas, etc.	Major	Secondary	Minor
Weight 3	3		
Community relationships and attitudes	Protection of the visual resource is important.		Protection of the visual resource is not important
Weight 4	4		
Other agency use and planning attitudes.	Major national or regional in scope	Secondary sub-region or state	Minor local
Weight 2		2	

Total

12

3

Sensitivity Unit 08-05

Low

This unit is the corridor delineated between Wardeville and Coalgate, Oklahoma on Highway 131.

The volume of car traffic is less than 20 vehicles per day according to average daily traffic counts.

The use of trails or navigable rivers is measured in volume at less than 2,000 visits per year.

No recreation or observation sites are noticeable in the unit; therefore, the attitudes of people associated with these areas are minor.

The local community is passive in its attitude towards visual change.

The land use and planning attitudes of agencies, other than the Bureau of Land Management, will come from the local level.

Criteria	High	Medium	Low
Use volume cars and trains	200,000 or more visits/yr. or more than 200 vehicles/day (ADT year round)	20,000 to 200,000 visits/yr. or 20 to 200 vehicles/day (ADT year round)	20,000 visits per yr. or less than 20 vehicles/day (ADT year round)
Weight 5			5
Use volume - trails, rivers, water bodies	20,000 or more visits/yr.	2000-20,000 visits/yr.	less than 2000 visits/yr.
Weight 1			1
User association, primitive areas, observation sites, recreation areas, etc.	Major	Secondary	Minor
Weight 3			3
Community relationships and attitudes	Protection of the visual resource is important.		Protection of the visual resource is not important
Weight 4		4	
Other agency use and planning attitudes.	Major national or regional in scope	Secondary sub-region or state	Minor local
Weight 2			2

Total

4

11

Sensitivity Unit 08-06

Low

The unit parallels Highway 31 west of Coalgate, Oklahoma and ends about six miles west of Coalgate itself.

The volume of cars is less than 20 vehicles per day with no train traffic through the unit.

No designated hiking trails or navigable rivers are located in the unit putting it into the low column.

No recreation areas or similar facilities are located along this portion of Highway 31 making user reaction to visual change minor.

To the local residents and owners of the land, protection of the visual resource is unimportant.

Any reaction to visual disturbance from governing agencies, other than the Bureau of Land Management, is confined to the local governing bodies.

Criteria	High	Medium	Low
Use volume cars and trains	200,000 or more visits/yr. or more than 200 vehicles/day (ADT year round)	20,000 to 200,000 visits/yr. or 20 to 200 vehicles/day (ADT year round)	20,000 visits per yr. or less than 20 vehicles/day (ADT year round)
Weight 5			5
Use volume - trails, rivers, water bodies	20,000 or more visits/yr.	2000-20,000 visits/yr.	less than 2000 visits/yr.
Weight 1			1
User association, primitive areas, observation sites, recreation areas, etc.	Major	Secondary	Minor
Weight 3			3
Community relationships and attitudes	Protection of the visual resource is important.		Protection of the visual resource is not important
Weight 4			4
Other agency use and planning attitudes.	Major national or regional in scope	Secondary sub-region or state	Minor local
Weight 2			2

Total

15

Sensitivity Unit 08-07

Low

This sensitivity unit is observed from numerous gravel county roads. The main direction of travel was north and south between Highway 31 and Highway 7 paralleling the Boggy Creek drainage.

Car travel is less than 20 vehicles per day and limited to local traffic.

Designated hiking trails and navigable rivers are non-existent making this weight low with less than 2,000 visits per year.

No recreation areas are available making user reaction to visual change minor.

The reaction of the local community to visual change is passive - neither important nor unimportant.

Any reaction to visual alterations by governing agencies, other than the Bureau of Land Management, would come from local, county or city governments.

Criteria	High	Medium	Low
Use volume cars and trains	200,000 or more visits/yr. or more than 200 vehicles/day (ADT year round)	20,000 to 200,000 visits/yr. or 20 to 200 vehicles/day (ADT year round)	20,000 visits per yr. or less than 20 vehicles/day (ADT year round)
Weight 5			5
Use volume - trails, rivers, water bodies	20,000 or more visits/yr.	2000-20,000 visits/yr.	less than 2000 visits/yr.
Weight 1			1
User association, primitive areas, observation sites, recreation areas, etc.	Major	Secondary	Minor
Weight 3			3
Community relationships and attitudes	Protection of the visual resource is important.		Protection of the visual resource is not important
Weight 4		4	
Other agency use and planning attitudes.	Major national or regional in scope	Secondary sub-region or state	Minor local
Weight 2			2

Total

4

11

Sensitivity Unit 08-08

Low

This unit forms along Highway 7 from Atoka, Oklahoma west for approximately 10 to 12 miles.

The volume of car traffic is between 20 and 200 vehicles per day on an average daily traffic count.

Designated trails and navigable rivers are nonexistent in the unit making the evaluation low or less than 2,000 visits per year.

Recreation areas and related facilities are not located along this route resulting in a minor reaction to visual change by people using such facilities.

To the local community the protection of the visual resource is not important.

Being a major travel route on a state owned highway, the attitudes of other agencies to major visual changes is felt to be secondary by subregion or state governing offices.

Criteria	High	Medium	Low
Use volume cars and trains	200,000 or more visits/yr. or more than 200 vehicles/day (ADT year round)	20,000 to 200,000 visits/yr. or 20 to 200 vehicles/day (ADT year round)	20,000 visits per yr. or less than 20 vehicles/day (ADT year round)
Weight 5		5	
Use volume - trails, rivers, water bodies	20,000 or more visits/yr.	2000-20,000 visits/yr.	less than 2000 visits/yr.
Weight 1			1
User association, primitive areas, observation sites, recreation areas, etc.	Major	Secondary	Minor
Weight 3			3
Community relationships and attitudes	Protection of the visual resource is important.		Protection of the visual resource is not important
Weight 4			4
Other agency use and planning attitudes.	Major national or regional in scope	Secondary sub-region or state	Minor local
Weight 2			2

Total

5

10

Sensitivity Unit 08-09

Low

The unit is between Atoka and Coalgate, Oklahoma along Highway 3.

The volume of car and train traffic on Highway 3 is between 20 and 200 vehicles per day.

The volume of people using navigable rivers or designated trails is less than 2,000 visits per year.

No observation sites or recreation facilities are located along the highway making the reaction of people using such facilities to changes in the visual resources minor or nonexistent.

To the people living and working in the area protection of the visual resource is not important.

The land use and planning attitudes of governing bodies, other than the Bureau of Land Management, is limited to local agencies.

Criteria	High	Medium	Low
Use volume cars and trains	200,000 or more visits/yr. or more than 200 vehicles/day (ADT year round)	20,000 to 200,000 visits/yr. or 20 to 200 vehicles/day (ADT year round)	20,000 visits per yr. or less than 20 vehicles/day (ADT year round)
Weight 5		5	
Use volume - trails, rivers, water bodies	20,000 or more visits/yr.	2000-20,000 visits/yr.	less than 2000 visits/yr.
Weight 1			1
User association, primitive areas, observation sites, recreation areas, etc.	Major	Secondary	Minor
Weight 3			3
Community relationships and attitudes	Protection of the visual resource is important.		Protection of the visual resource is not important
Weight 4			4
Other agency use and planning attitudes.	Major national or regional in scope	Secondary sub-region or state	Minor local
Weight 2			2

Total

5

10

Sensitivity Unit 08-10

Medium

This unit is located along Highway 43 east from Coal gate, Oklahoma to Atoka Reservoir and Highway 69.

The volume of traffic is between 20 and 200 vehicles per day based on average daily traffic counts.

The volume of use for trails and navigable waterways is between 2,000 and 20,000 visits per year. The volume of use for this criteria is attributed to Atoka Reservoir.

The reaction of people using observation sites on recreation areas is minor

The reaction of the people in and around Highway 43 is passive to any change in the visual resource.

The attitudes and planning policies of government agencies, other than the Bureau of Land Management, is limited to the local city and county governing bodies.

Criteria	High	Medium	Low
Use volume cars and trains	200,000 or more visits/yr. or more than 200 vehicles/day (ADT year round)	20,000 to 200,000 visits/yr. or 20 to 200 vehicles/day (ADT year round)	20,000 visits per yr. or less than 20 vehicles/day (ADT year round)
Weight 5		5	
Use volume - trails, rivers, water bodies	20,000 or more visits/yr.	2000-20,000 visits/yr.	less than 2000 visits/yr.
Weight 1		1	
User association, primitive areas, observation sites, recreation areas, etc.	Major	Secondary	Minor
Weight 3			3
Community relationships and attitudes	Protection of the visual resource is important.		Protection of the visual resource is not important
Weight 4		4	
Other agency use and planning attitudes.	Major national or regional in scope	Secondary sub-region or state	Minor local
Weight 2		2	

Total

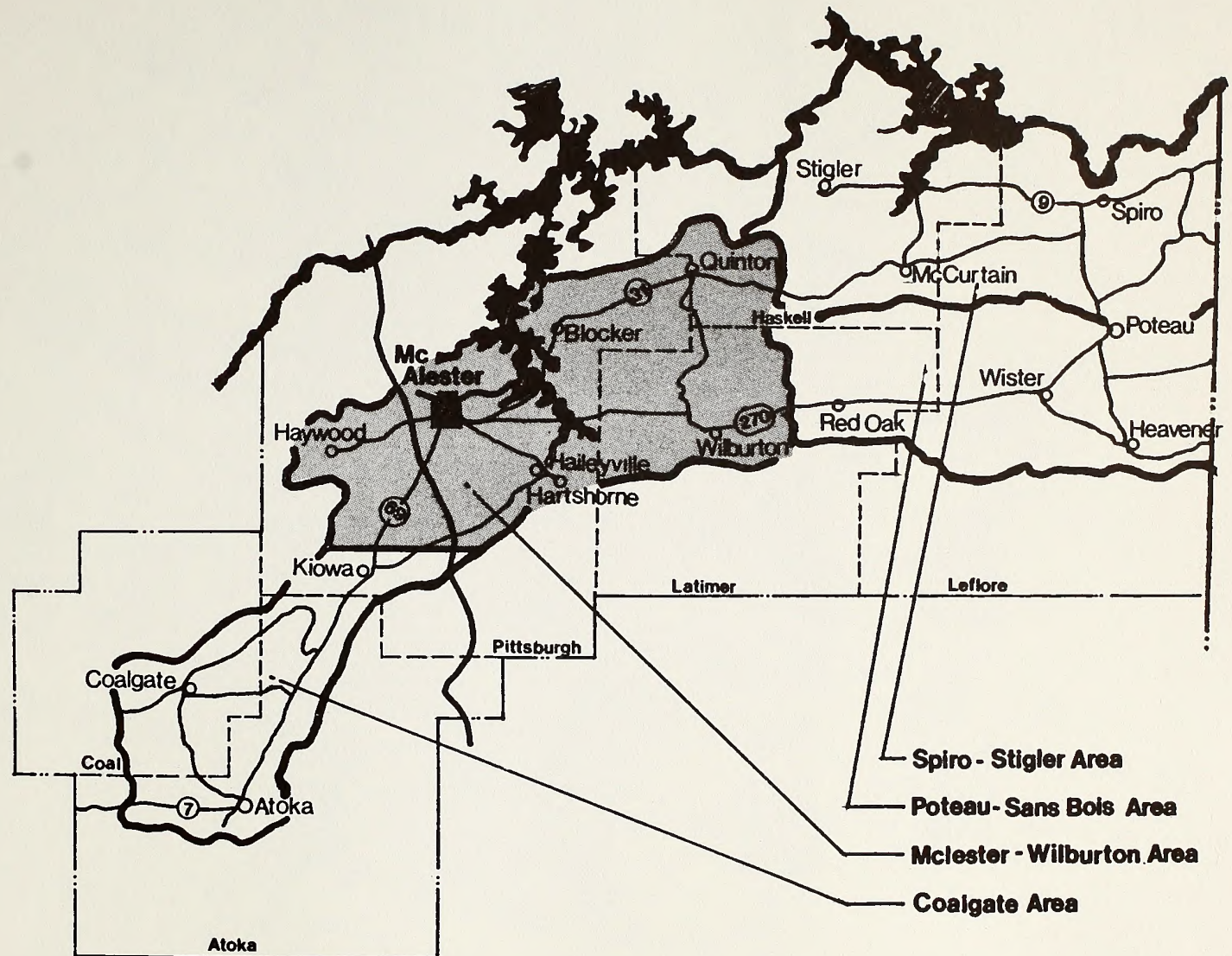
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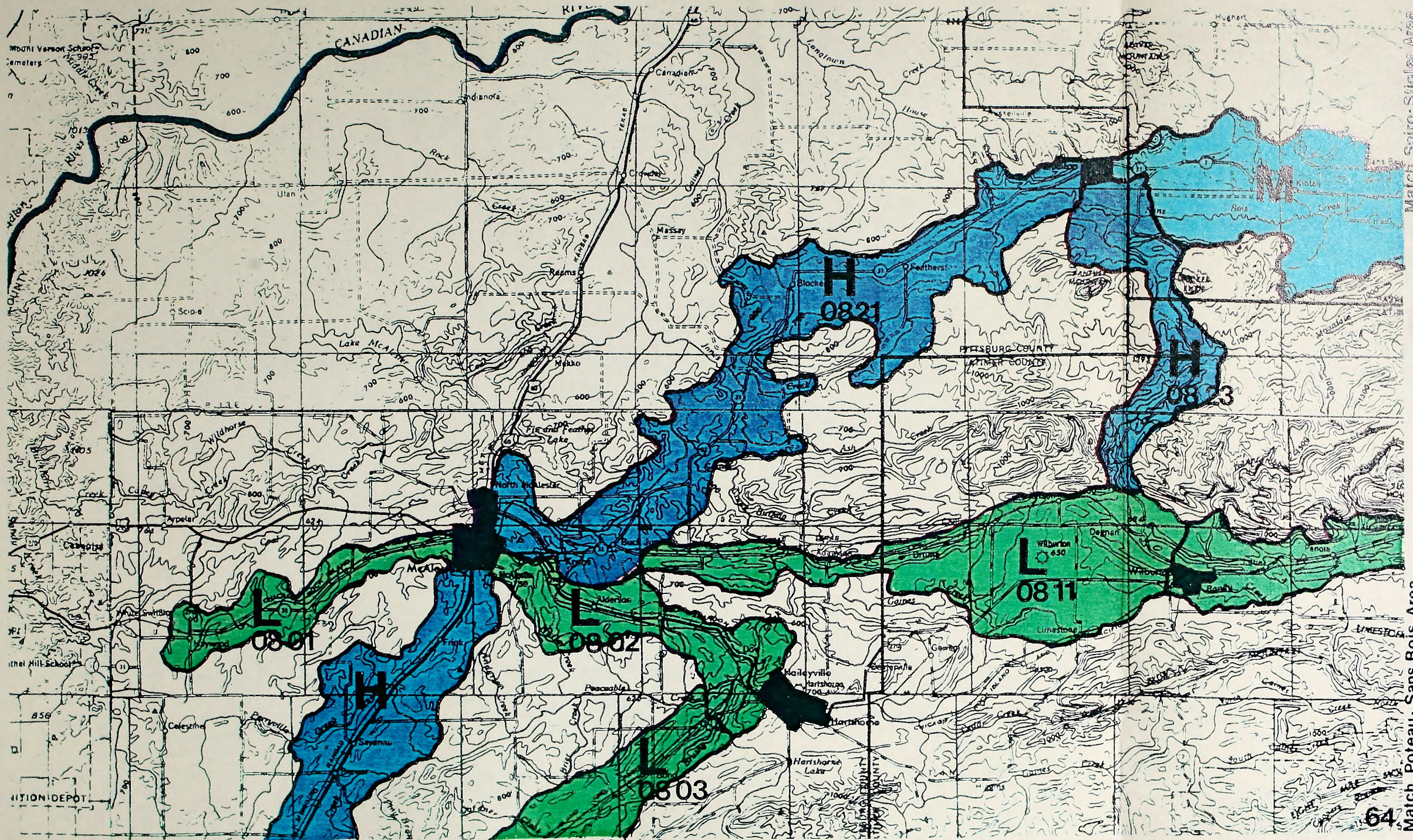


Ranch buildings on Highway 31 between McAlester and Haywood, Oklahoma

McAlester-Wilburton Area



McAlester-Wilburton Area



Sensitivity Unit 08-01

Low

The unit is a corridor between McAlester and Haywood, Oklahoma on Highway 31.

The volume of cars is less than 20 vehicles per day.

The number of people using designated trails and navigable rivers is less than 2,000 units per year.

The reaction of people using recreation sites or related facilities to changes on the landscape is low or minor due to a lack of such facilities.

To the individuals or groups of individuals living and working in the area, protection of the visual resource is important.

The attitudes and planning objectives of governing agencies, other than the Bureau of Land Management, towards visual change is confined to local governing bodies.

Criteria	High	Medium	Low
Use volume cars and trains	200,000 or more visits/yr. or more than 200 vehicles/day (ADT year round)	20,000 to 200,000 visits/yr. or 20 to 200 vehicles/day (ADT year round)	20,000 visits per yr. or less than 20 vehicles/day (ADT year round)
Weight 5			5
Use volume - trails, rivers, water bodies	20,000 or more visits/yr.	2000-20,000 visits/yr.	less than 2000 visits/yr.
Weight 1			1
User association, primitive areas, observation sites, recreation areas, etc.	Major	Secondary	Minor
Weight 3			3
Community relationships and attitudes	Protection of the visual resource is important.		Protection of the visual resource is not important
Weight 4	4		
Other agency use and planning attitudes.	Major national or regional in scope	Secondary sub-region or state	Minor local
Weight 2			2

Total

4

11

Sensitivity Unit 08-02

Low

This unit is located along Highway 270 between Krebs and Haileyville, Oklahoma.

The volume of people using trails and rivers is less than 2,000 visits per year.

The reaction to changes in the visual resource of people using recreation sites on similar facilities is low.

The local community felt protection of the visual resource was not important.

Other than the Bureau of Land Management, agencies planning use and attitudes are confined to local governing bodies.

Criteria	High	Medium	Low
Use volume cars and trains	200,000 or more visits/yr. or more than 200 vehicles/day (ADT year round)	20,000 to 200,000 visits/yr. or 20 to 200 vehicles/day (ADT year round)	20,000 visits per yr. or less than 20 vehicles/day (ADT year round)
Weight 5	5		
Use volume - trails, rivers, water bodies	20,000 or more visits/yr.	2000-20,000 visits/yr.	less than 2000 visits/yr.
Weight 1			1
User association, primitive areas, observation sites, recreation areas, etc.	Major	Secondary	Minor
Weight 3			3
Community relationships and attitudes	Protection of the visual resource is important.		Protection of the visual resource is not important.
Weight 4			4
Other agency use and planning attitudes.	Major national or regional in scope	Secondary sub-region or state	Minor local
Weight 2			2

Total

5

10

Sensitivity Unit 08-03

Low

Between Haileyville and Pittsburgh, Oklahoma on Highway 63 is the corridor for this unit.

The volume of travel for cars and trains is less than 20 vehicles per day as per average daily travel year round.

The use volume of people using trails and rivers in the unit is less than 2,000 visits per year.

The people using observation sites or recreation areas is minor from a lack of these facilities in the area.

The local communities attitude toward visual changes is passive.

The use and planning attitudes towards visual change are minor concerning only local governments.

Criteria	High	Medium	Low
Use volume cars and trains	200,000 or more visits/yr. or more than 200 vehicles/day (ADT year round)	20,000 to 200,000 visits/yr. or 20 to 200 vehicles/day (ADT year round)	20,000 visits per yr. or less than 20 vehicles/day (ADT year round)
Weight 5			5
Use volume - trails, rivers, water bodies	20,000 or more visits/yr.	2000-20,000 visits/yr.	less than 2000 visits/yr.
Weight 1			1
User association, primitive areas, observation sites, recreation areas, etc.	Major	Secondary	Minor
Weight 3			3
Community relationships and attitudes	Protection of the visual resource is important.		Protection of the visual resource is not important
Weight 4		4	
Other agency use and planning attitudes.	Major national or regional in scope	Secondary sub-region or state	Minor local
Weight 2			2

Total

4

11

Sensitivity Unit 08-11

Low

The unit is located east from Buck Junction through Adamson, Drumb, Chili, and Degnan, Oklahoma.

The volume of travel for cars and trains is less than 20 vehicles per day as per average daily travel year round.

The use volume of people using trails and rivers in the unit is less than 2,000 visits per year.

The people using observation sites or recreation areas is minor from a lack of these facilities in the area.

The local communities attitude toward visual changes is passive.

Criteria	High	Medium	Low
Use volume cars and trains	200,000 or more visits/yr. or more than 200 vehicles/day (ADT year round)	20,000 to 200,000 visits/yr. or 20 to 200 vehicles/day (ADT year round)	20,000 visits per yr. or less than 20 vehicles/day (ADT year round)
Weight 5			5
Use volume - trails, rivers, water bodies	20,000 or more visits/yr.	2000-20,000 visits/yr.	less than 2000 visits/yr.
Weight 1			1
User association, primitive areas, observation sites, recreation areas, etc.	Major	Secondary	Minor
Weight 3			3
Community relationships and attitudes	Protection of the visual resource is important.		Protection of the visual resource is not important
Weight 4		4	
Other agency use and planning attitudes.	Major national or regional in scope	Secondary sub-region or state	Minor local
Weight 2			2

Total

4

11

Sensitivity Unit 08-23

High

The unit is located on Highway 2 from Quinton, Oklahoma to Robbers Cave State Park.

The volume of traffic is 200 vehicles per day.

The volume of users of any trails or rivers is 2,000 to 20,000 visits per year which is largely attributed to the State Park and mountainous terrain.

The users attitudes towards visual change is majorly attributed to the Robbers Cave State Park.

Community attitudes towards the protection of the visual resource is unimportant.

The attitudes of governing agencies, other than the Bureau of Land Management, is secondary due to state owned properties and developments.

Criteria	High	Medium	Low
Use volume cars and trains	200,000 or more visits/yr. or more than 200 vehicles/day (ADT year round)	20,000 to 200,000 visits/yr. or 20 to 200 vehicles/day (ADT year round)	20,000 visits per yr. or less than 20 vehicles/day (ADT year round)
Weight 5	5		
Use volume - trails, rivers, water bodies	20,000 or more visits/yr.	2000-20,000 visits/yr.	less than 2000 visits/yr.
Weight 1		1	
User association, primitive areas, observation sites, recreation areas, etc.	Major	Secondary	Minor
Weight 3	3		
Community relationships and attitudes	Protection of the visual resource is important.		Protection of the visual resource is not important
Weight 4	4		
Other agency use and planning attitudes.	Major national or regional in scope	Secondary sub-region or state	Minor local
Weight 2		2	

Total

12

3

Sensitivity Unit 08-24 High

The unit is a visual corridor on Highway 31 from Quinton, Oklahoma to Buck Junction.

The volume of people using cars and trains is high, more than 200 vehicles per day.

The volume of people using trails and rivers is more than 20,000 visits per year due to Eufaula Reservoir.

The people using recreation sites and observation points around Eufaula Reservoir have a major concern for any change in visual quality.

The local communities attitudes towards visual change are important.

Subregion or state agencies are more concerned about visual change of the scenic quality outside of those concerns of the Bureau of Land Management.

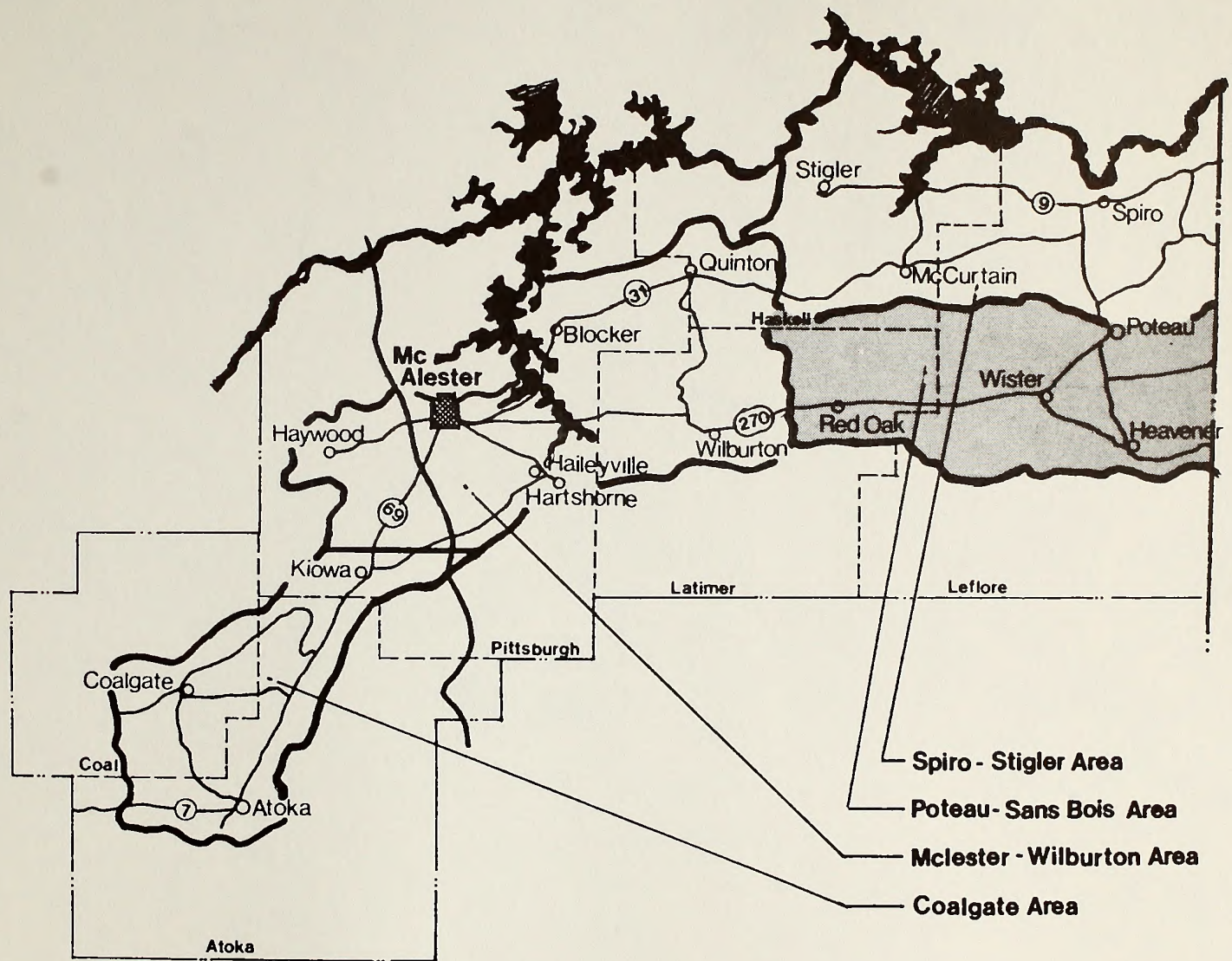
Criteria	High	Medium	Low
Use volume cars and trains	200,000 or more visits/yr. or more than 200 vehicles/day (ADT year round)	20,000 to 200,000 visits/yr. or 20 to 200 vehicles/day (ADT year round)	20,000 visits per yr. or less than 20 vehicles/day (ADT year round)
Weight 5	5		
Use volume - trails, rivers, water bodies	20,000 or more visits/yr.	2000-20,000 visits/yr.	less than 2000 visits/yr.
Weight 1	1		
User association, primitive areas, observation sites, recreation areas, etc.	Major	Secondary	Minor
Weight 3	3		
Community relationships and attitudes	Protection of the visual resource is important.		Protection of the visual resource is not important
Weight 4	4		
Other agency use and planning attitudes.	Major national or regional in scope	Secondary sub-region or state	Minor local
Weight 2		2	

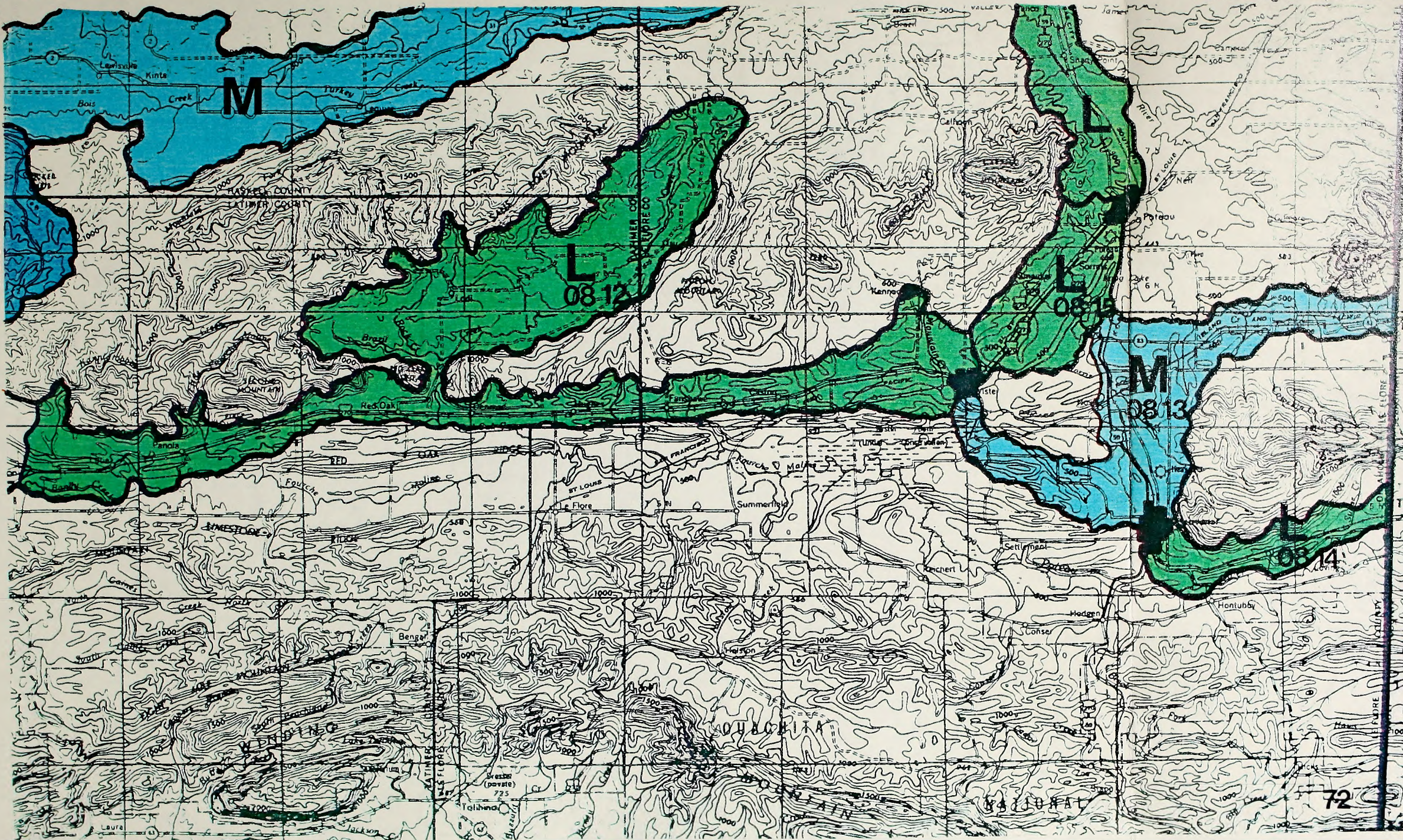
Total

13

2

Poteau-Sans Bois Area





Sensitivity Unit 08-12

Low

This unit is located between Wilburton and Wister, Oklahoma on Highway 270.

The traffic volume on Highway 270 is determined to be more than 200 vehicles per day according to average daily traffic counts.

The volume of people using designated trails and navigable rivers is determined to be less than 2,000 visits per year.

The response of people using recreation areas and similar facilities to visual alterations of the landscape would be low or minor.

Protection of the visual resource is determined not important to the local community.

The attitudes towards planning and/or development of the visual resource by agencies other than the Bureau of Land Management would be left up to the local planning offices.

Criteria	High	Medium	Low
Use volume cars and trains	200,000 or more visits/yr. or more than 200 vehicles/day (ADT year round)	20,000 to 200,000 visits/yr. or 20 to 200 vehicles/day (ADT year round)	20,000 visits per yr. or less than 20 vehicles/day (ADT year round)
Weight 5	5		
Use volume - trails, rivers, water bodies	20,000 or more visits/yr.	2000-20,000 visits/yr.	less than 2000 visits/yr.
Weight 1			1
User association, primitive areas, observation sites, recreation areas, etc.	Major	Secondary	Minor
Weight 3			3
Community relationships and attitudes	Protection of the visual resource is important.		Protection of the visual resource is not important
Weight 4			4
Other agency use and planning attitudes.	Major national or regional in scope	Secondary sub-region or state	Minor local
Weight 2			2

Total

5

10

Sensitivity Unit 08-13

Medium

The unit is along Highway 59 from its junction with Highway 270 to Heavener, Oklahoma and Highway 83 from its junction with Highway 59 to the Arkansas-Oklahoma State line.

The volume of traffic on these routes is determined to be from 20 to 200 vehicles per day according to average daily traffic counts.

The volume of travel on designated trails and navigable waterways is less than 2,000 visits per year.

The people using recreation sites and related facilities would have a moderate or secondary response to alterations of the visual resource.

The people who live in and around this unit feel that the protection of the visual resource is important.

Agencies, other than the Bureau of Land Management, having planning attitudes towards protection of the visual resource would be regional or state bodies of government.

Criteria	High	Medium	Low
Use volume cars and trains	200,000 or more visits/yr. or more than 200 vehicles/day (ADT year round)	20,000 to 200,000 visits/yr. or 20 to 200 vehicles/day (ADT year round)	20,000 visits per yr. or less than 20 vehicles/day (ADT year round)
Weight	5	5	
Use volume - trails, rivers, water bodies	20,000 or more visits/yr.	2000-20,000 visits/yr.	less than 2000 visits/yr.
Weight	1		1
User association, primitive areas, observation sites, recreation areas, etc.	Major	Secondary	Minor
Weight	3	3	
Community relationships and attitudes	Protection of the visual resource is important.		Protection of the visual resource is not important
Weight	4	4	
Other agency use and planning attitudes.	Major national or regional in scope	Secondary sub-region or state	Minor local
Weight	2	2	

Total	4	10	1
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Sensitivity Unit 08-14

Low

This unit is located from Heavener, Oklahoma east to the Arkansas-Oklahoma State line.

The volume of traffic is considered to be between 20 and 200 vehicles per day as per average daily traffic counts.

Volume of people using designated trails and navigable rivers is determined to be less than 2000 visits per year.

The reaction of people using recreation sites on related facilities to changes on the landscape is determined to be low.

To the people living along or near the unit, the protection of the visual resource is not important.

Governing agencies other than the Bureau of Land Management having input to the use of the visual resource would be regional or state governments.

Criteria	High	Medium	Low
Use volume cars and trains	200,000 or more visits/yr. or more than 200 vehicles/day (ADT year round)	20,000 to 200,000 visits/yr. or 20 to 200 vehicles/day (ADT year round)	20,000 visits per yr. or less than 20 vehicles/day (ADT year round)
Weight 5			5
Use volume - trails, rivers, water bodies	20,000 or more visits/yr.	2000-20,000 visits/yr.	less than 2000 visits/yr.
Weight 1			1
User association, primitive areas, observation sites, recreation areas, etc.	Major	Secondary	Minor
Weight 3			3
Community relationships and attitudes	Protection of the visual resource is important.		Protection of the visual resource is not important
Weight 4			4
Other agency use and planning attitudes.	Major national or regional in scope	Secondary sub-region or state	Minor local
Weight 2			2

Total

5

10

Sensitivity Unit 08-15

Low

The unit is located on Highway 270 from Wister, Oklahoma to Poteau, Oklahoma.

The volume of vehicle traffic on Highway 270 is more than 200 vehicles per day according to average daily traffic counts.

The volume of people using designated trails and navigable rivers is less than 2,000 visits per year.

A minor reaction to the alterations of the landscape is perceived of people using recreation areas or similar facilities.

To the local community, protection of the visual resource is not important.

Governing agencies having input on changes of the visual resource would be confined to local city and county governing agencies.

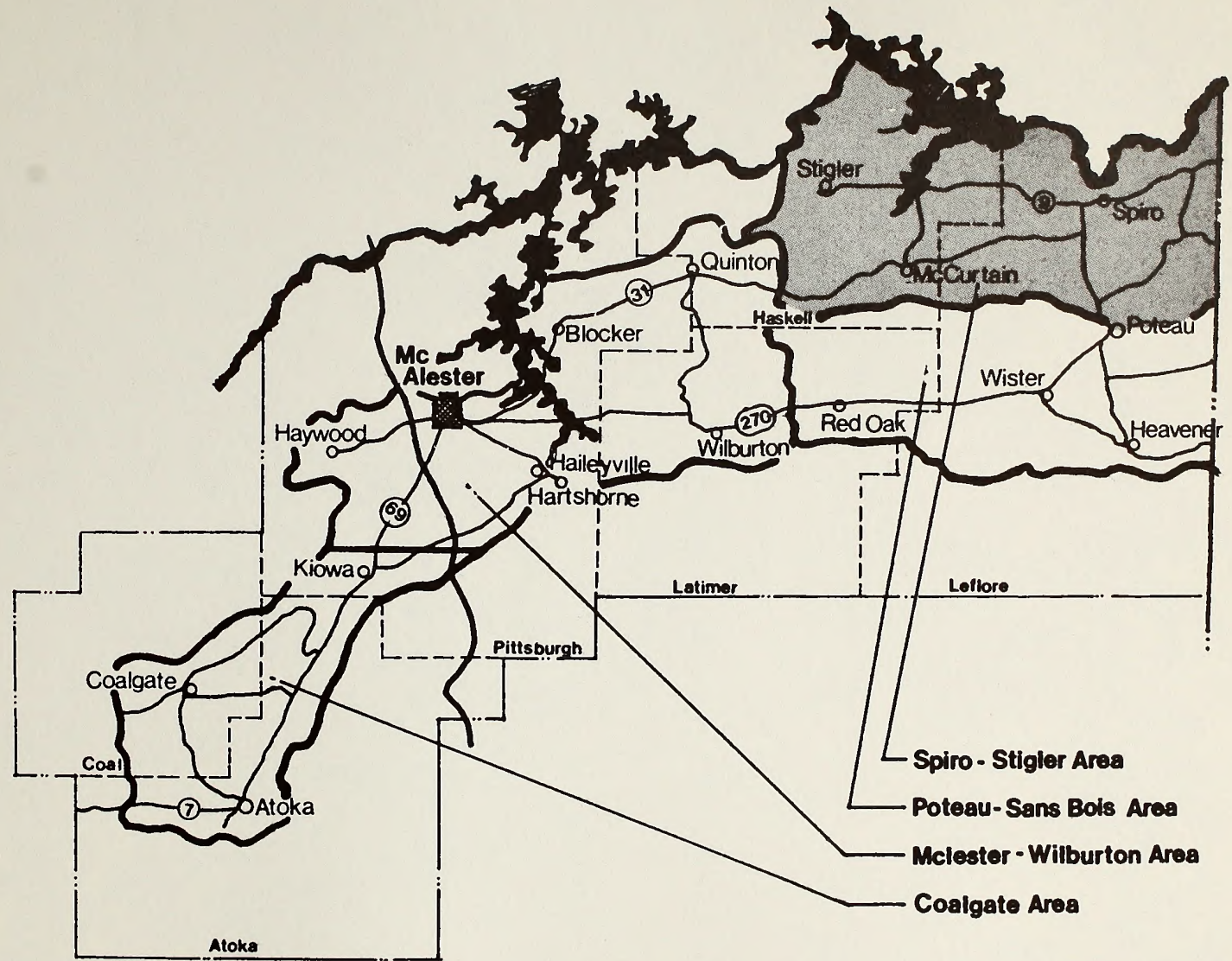
Criteria	High	Medium	Low
Use volume cars and trains	200,000 or more visits/yr. or more than 200 vehicles/day (ADT year round)	20,000 to 200,000 visits/yr. or 20 to 200 vehicles/day (ADT year round)	20,000 visits per yr. or less than 20 vehicles/day (ADT year round)
Weight 5	5		
Use volume - trails, rivers, water bodies	20,000 or more visits/yr.	2000-20,000 visits/yr.	less than 2000 visits/yr.
Weight 1			1
User association, primitive areas, observation sites, recreation areas, etc.	Major	Secondary	Minor
Weight 3			3
Community relationships and attitudes	Protection of the visual resource is important.		Protection of the visual resource is not important
Weight 4			4
Other agency use and planning attitudes.	Major national or regional in scope	Secondary sub-region or state	Minor local
Weight 2			2

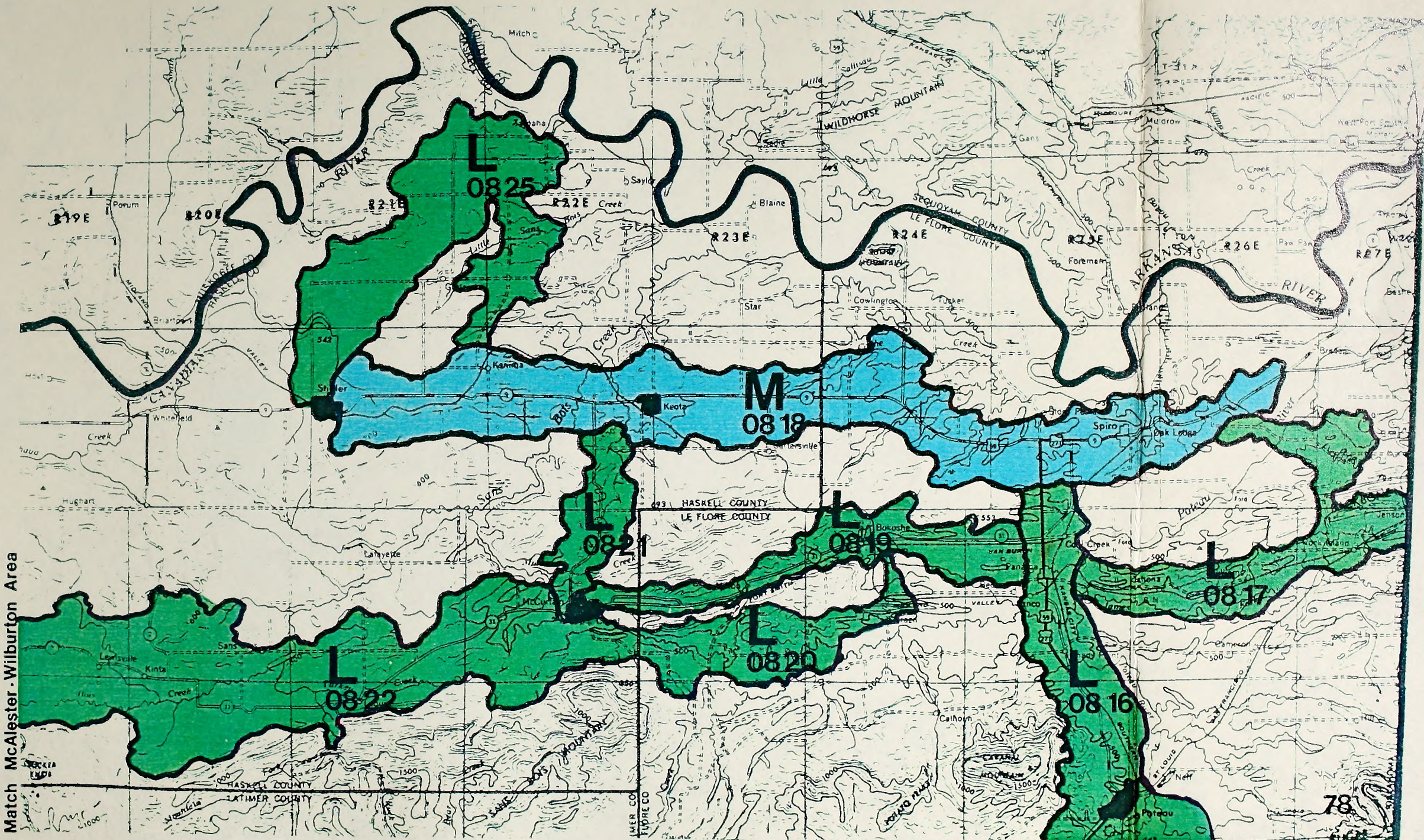
Total

5

10

Stigler · Spiro Area





Match McAlester · Wilburton Area

Sensitivity Unit 08-16

Low

This unit is located on Highway 271 from Poteau, Oklahoma to the junction of Highway 271 and Highway 9.

The traffic volume is determined to be more than 200 vehicles per day.

The volume of people on trails and rivers is less than 2,000 per year.

A minor reaction to disturbances of the visual resource would come from people using recreation areas or observation sites.

To the people living and working in the area, protection of the visual resource is unimportant.

Local, small government agencies would have input to visual change in relationship to their planning uses and attitudes.

Criteria	High	Medium	Low
Use volume cars and trains	200,000 or more visits/yr. or more than 200 vehicles/day (ADT year round)	20,000 to 200,000 visits/yr. or 20 to 200 vehicles/day (ADT year round)	20,000 visits per yr. or less than 20 vehicles/day (ADT year round)
Weight 5	5		
Use volume - trails, rivers, water bodies	20,000 or more visits/yr.	2000-20,000 visits/yr.	less than 2000 visits/yr.
Weight 1			1
User association, primitive areas, observation sites, recreation areas, etc.	Major	Secondary	Minor
Weight 3			3
Community relationships and attitudes	Protection of the visual resource is important.		Protection of the visual resource is not important
Weight 4			4
Other agency use and planning attitudes.	Major national or regional in scope	Secondary sub-region or state	Minor local
Weight 2			2

Total

5

10

Sensitivity Unit 08-17

Low

This unit is an area east of the Highway 271 covering the small towns of Panama, Rock Island, and Pocola, Oklahoma.

The volume of vehicle traffic on the various roads in the unit is collectively determined at less than 20 vehicles per day.

The volume of use for trails and rivers is between 2,000 and 20,000 visits per year. The volume is attributed to the Poteau River, a navigable river within the unit.

Reactions to disturbances of the landscape can be expected by people using recreation sites but not to a great extent.

To the people living and working in the area, protection of the visual resource is not important.

Only local agencies would have input as to land use and planning attitudes concerning the visual resource.

Criteria	High	Medium	Low
Use volume cars and trains	200,000 or more visits/yr. or more than 200 vehicles/day (ADT year round)	20,000 to 200,000 visits/yr. or 20 to 200 vehicles/day (ADT year round)	20,000 visits per yr. or less than 20 vehicles/day (ADT year round)
Weight 5			5
Use volume - trails, rivers, water bodies	20,000 or more visits/yr.	2000-20,000 visits/yr.	less than 2000 visits/yr.
Weight 1		1	
User association, primitive areas, observation sites, recreation areas, etc.	Major	Secondary	Minor
Weight 3		3	
Community relationships and attitudes	Protection of the visual resource is important.		Protection of the visual resource is not important
Weight 4			4
Other agency use and planning attitudes.	Major national or regional in scope	Secondary sub-region or state	Minor local
Weight 2			2

Total

4

11

Sensitivity Unit 08-18

Medium

This unit is from Highway 9 between Stigler, Oklahoma and Spiro, Oklahoma.

The volume of vehicle traffic is determined to be more than 200 vehicles per day.

The Arkansas River and Kerr Reservoir are the key factors for the number of people using trails and navigable rivers in the area to be between 2,000 and 20,000 visits per year.

For the individuals using recreation areas within the unit, disturbances of the visual resource is an important aspect of the scenery.

To the local community, protection of the visual resource is a passive or take it or leave it attitude.

Regional and state governments become involved in the planning use and attitudes towards the visual resource.

Criteria	High	Medium	Low
Use volume cars and trains	200,000 or more visits/yr. or more than 200 vehicles/day (ADT year round)	20,000 to 200,000 visits/yr. or 20 to 200 vehicles/day (ADT year round)	20,000 visits per yr. or less than 20 vehicles/day (ADT year round)
Weight 5	5		
Use volume - trails, rivers, water bodies	20,000 or more visits/yr.	2000-20,000 visits/yr.	less than 2000 visits/yr.
Weight 1		1	
User association, primitive areas, observation sites, recreation areas, etc.	Major	Secondary	Minor
Weight 3		3	
Community relationships and attitudes	Protection of the visual resource is important.		Protection of the visual resource is not important
Weight 4		4	
Other agency use and planning attitudes.	Major national or regional in scope	Secondary sub-region or state	Minor local
Weight 2		2	

Total

5

10

Sensitivity Unit 08-19

Low

This unit is on Highway 31 between Panama, Oklahoma and McCurtain, Oklahoma.

Vehicle traffic in this area is between 20 and 200 vehicles per day.

The use of trails and rivers is below 2,000 visits per year.

Users of recreation or observation sites are very limited making reaction to changes in the visual resource a minor portion of the evaluation.

To people living and working in and around the area, protection of the visual resource is unimportant.

If local city and town governments exist, these would be the agencies having input to changes of the visual resource.

Criteria	High	Medium	Low
Use volume cars and trains	200,000 or more visits/yr. or more than 200 vehicles/day (ADT year round)	20,000 to 200,000 visits/yr. or 20 to 200 vehicles/day (ADT year round)	20,000 visits per yr. or less than 20 vehicles/day (ADT year round)
Weight 5		5	
Use volume - trails, rivers, water bodies	20,000 or more visits/yr.	2000-20,000 visits/yr.	less than 2000 visits/yr.
Weight 1			1
User association, primitive areas, observation sites, recreation areas, etc.	Major	Secondary	Minor
Weight 3			3
Community relationships and attitudes	Protection of the visual resource is important.		Protection of the visual resource is not important
Weight 4			4
Other agency use and planning attitudes.	Major national or regional in scope	Secondary sub-region or state	Minor local
Weight 2			2

Total

5

10

Sensitivity Unit 08-20

Low

This unit includes a series of gravel roads south of McCurtain and east to Bokoshe, Oklahoma.

The volume of traffic on the roads is less than 20 vehicles per day.

Trail and navigable river traffic is determined to be less than 2,000 visits per year.

No recreation sites exist in the sensitivity unit which makes the reaction of people using such sites low or non-existent.

People living and working within the region feel the protection of the visual resource is not important.

Land use and planning attitudes relative to the visual resource would come from local city or town governments.

Criteria	High	Medium	Low
Use volume cars and trains	200,000 or more visits/yr. or more than 200 vehicles/day (ADT year round)	20,000 to 200,000 visits/yr. or 20 to 200 vehicles/day (ADT year round)	20,000 visits per yr. or less than 20 vehicles/day (ADT year round)
Weight 5			5
Use volume - trails, rivers, water bodies	20,000 or more visits/yr.	2000-20,000 visits/yr.	less than 2000 visits/yr.
Weight 1			1
User association, primitive areas, observation sites, recreation areas, etc.	Major	Secondary	Minor
Weight 3			3
Community relationships and attitudes	Protection of the visual resource is important.		Protection of the visual resource is not important
Weight 4			4
Other agency use and planning attitudes.	Major national or regional in scope	Secondary sub-region or state	Minor local
Weight 2			2

Total

15

83

Sensitivity Unit 08-21

Low

This unit is a section of Highway 26 between McCurtain, Oklahoma and the junction of Highway 9 and 26.

Volume of vehicle traffic on Highway 26 is between 20 and 200 vehicles per day.

Designated trails and navigable rivers have less than 2,000 visits per year.

No recreation sites or related facilities exist along Highway 26 making reaction to changes in visual resource low.

To the residents of the area, protection of the visual resource is unimportant.

Land use and planning attitudes relative to the visual resource would come from local city or town governments.

Criteria	High	Medium	Low
Use volume cars and trains	200,000 or more visits/yr. or more than 200 vehicles/day (ADT year round)	20,000 to 200,000 visits/yr. or 20 to 200 vehicles/day (ADT year round)	20,000 visits per yr. or less than 20 vehicles/day (ADT year round)
Weight 5		5	
Use volume - trails, rivers, water bodies	20,000 or more visits/yr.	2000-20,000 visits/yr.	less than 2000 visits/yr.
Weight 1			1
User association, primitive areas, observation sites, recreation areas, etc.	Major	Secondary	Minor
Weight 3			3
Community relationships and attitudes	Protection of the visual resource is important.		Protection of the visual resource is not important
Weight 4			4
Other agency use and planning attitudes.	Major national or regional in scope	Secondary sub-region or state	Minor local
Weight 2			2

Total

5

10

Sensitivity Unit 08-22

Medium

The unit is located along Highway 31 between McCurtain and Quinton, Oklahoma.

The amount of vehicle traffic on Highway 31 is between 20 and 200 vehicles per day.

Users of trails and rivers number less than 2,000 visits per year.

The lack of recreation sites and other related facilities cause a low reaction to change of the visual resource.

Reaction of the residents in and around the area is passive to changes of the visual resource.

The reaction of governing agencies other than the Bureau of Land Management would come from local town or city bodies of government.

Criteria	High	Medium	Low
Use volume cars and trains	200,000 or more visits/yr. or more than 200 vehicles/day (ADT year round)	20,000 to 200,000 visits/yr. or 20 to 200 vehicles/day (ADT year round)	20,000 visits per yr. or less than 20 vehicles/day (ADT year round)
Weight 5		5	
Use volume - trails, rivers, water bodies	20,000 or more visits/yr.	2000-20,000 visits/yr.	less than 2000 visits/yr.
Weight 1			1
User association, primitive areas, observation sites, recreation areas, etc.	Major	Secondary	Minor
Weight 3			3
Community relationships and attitudes	Protection of the visual resource is important.		Protection of the visual resource is not important
Weight 4		4	
Other agency use and planning attitudes.	Major national or regional in scope	Secondary sub-region or state	Minor local
Weight 2			2

Total

9

6

Sensitivity Unit 08- 25

Low

This unit encompasses an area north from Stigler, Oklahoma to the Arkansas River and the small town of Tamaha, Oklahoma.

The volume of vehicles on the gravel roads is less than 20 vehicles per day.

The volume of trail and river travel is from 0 to 2,000 visits per year.

Recreation sites or related facilities are nonexistent within the unit making user reaction absent.

Protection of the visual resource is a take it or leave it passive attitude by local residents.

Government agencies, other than the Bureau of Land Management, having response to changes of the visual resource are local town and county governing bodies.

Criteria	High	Medium	Low
Use volume cars and trains	200,000 or more visits/yr. or more than 200 vehicles/day (ADT year round)	20,000 to 200,000 visits/yr. or 20 to 200 vehicles/day (ADT year round)	20,000 visits per yr. or less than 20 vehicles/day (ADT year round)
Weight 5			5
Use volume - trails, rivers, water bodies	20,000 or more visits/yr.	2000-20,000 visits/yr.	less than 2000 visits/yr.
Weight 1			1
User association, primitive areas, observation sites, recreation areas, etc.	Major	Secondary	Minor
Weight 3			3
Community relationships and attitudes	Protection of the visual resource is important.		Protection of the visual resource is not important
Weight 4		4	
Other agency use and planning attitudes.	Major national or regional in scope	Secondary sub-region or state	Minor local
Weight 2			2

Total

4

11

Section III

Visual Zones

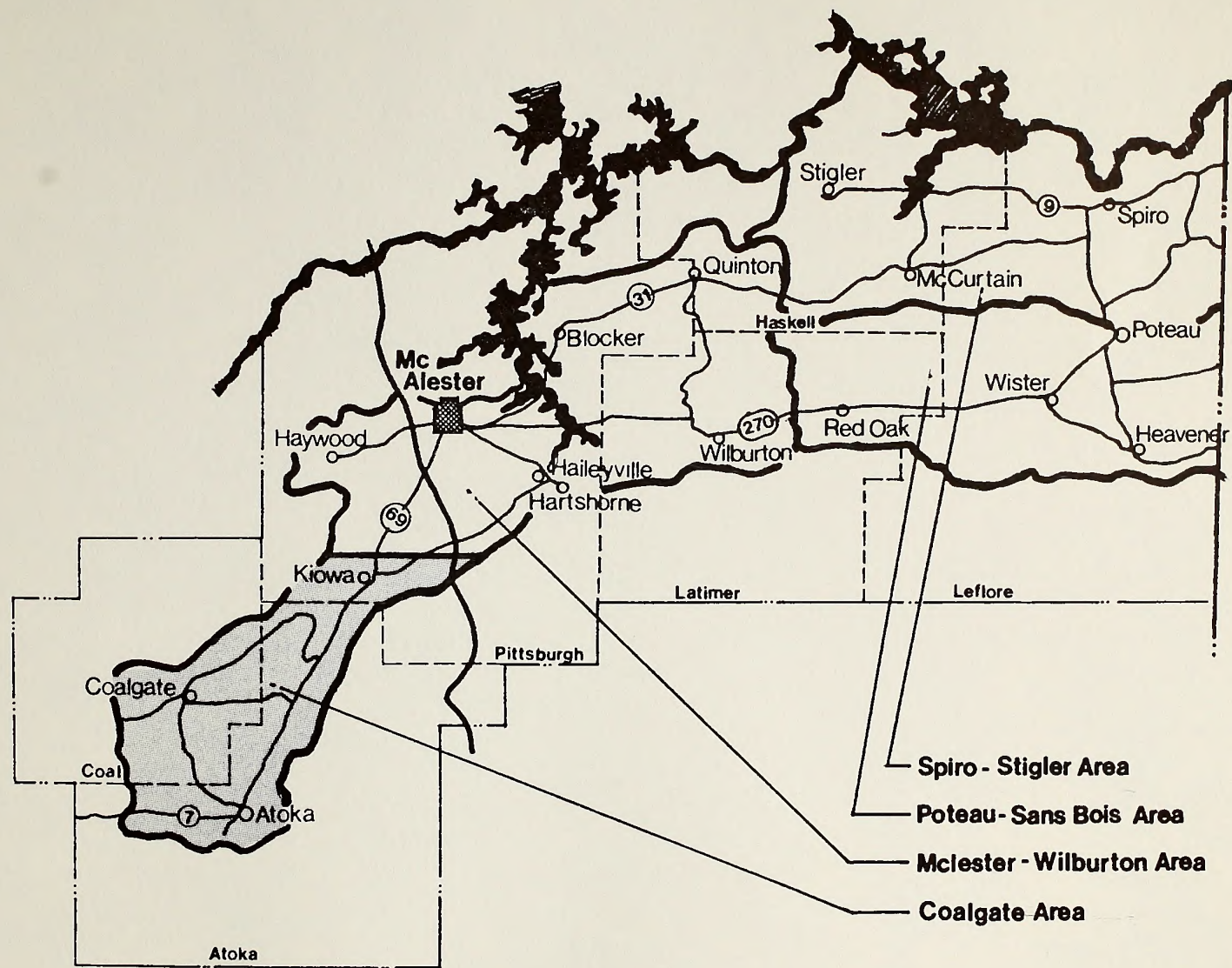
Visual Zones

Typically throughout the study area the foreground-middleground range is the only visual zone delineated. The foreground-middleground range being that between 0 and 3-5 miles in distance from the point of observation. The limitation of distance zones is due to the dense vegetation, low rolling terrain, or a combination of the two. The proximity of travel routes is another reason for the limitation of sight distance.

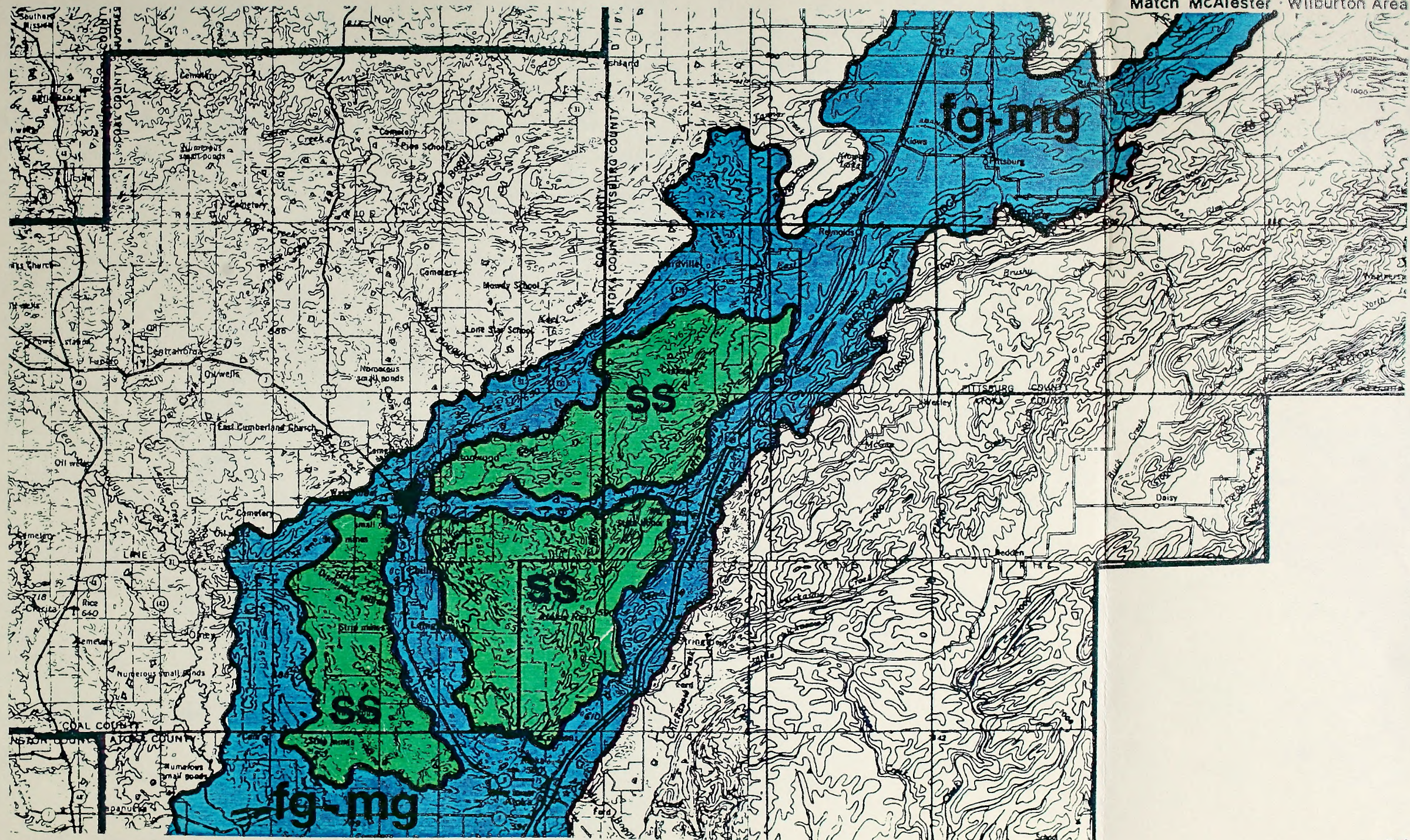
Background zones are areas visible within 5-15 miles from certain points of observation. The same limitations are responsible for the lack of background zones as for the frequency of foreground-middleground zones.

Vegetation and low rolling terrain were factors responsible for the numerous amount of seldom seen area. Seldom seen areas are described as that hidden from view from the designated travel routes.

Coalgate Area

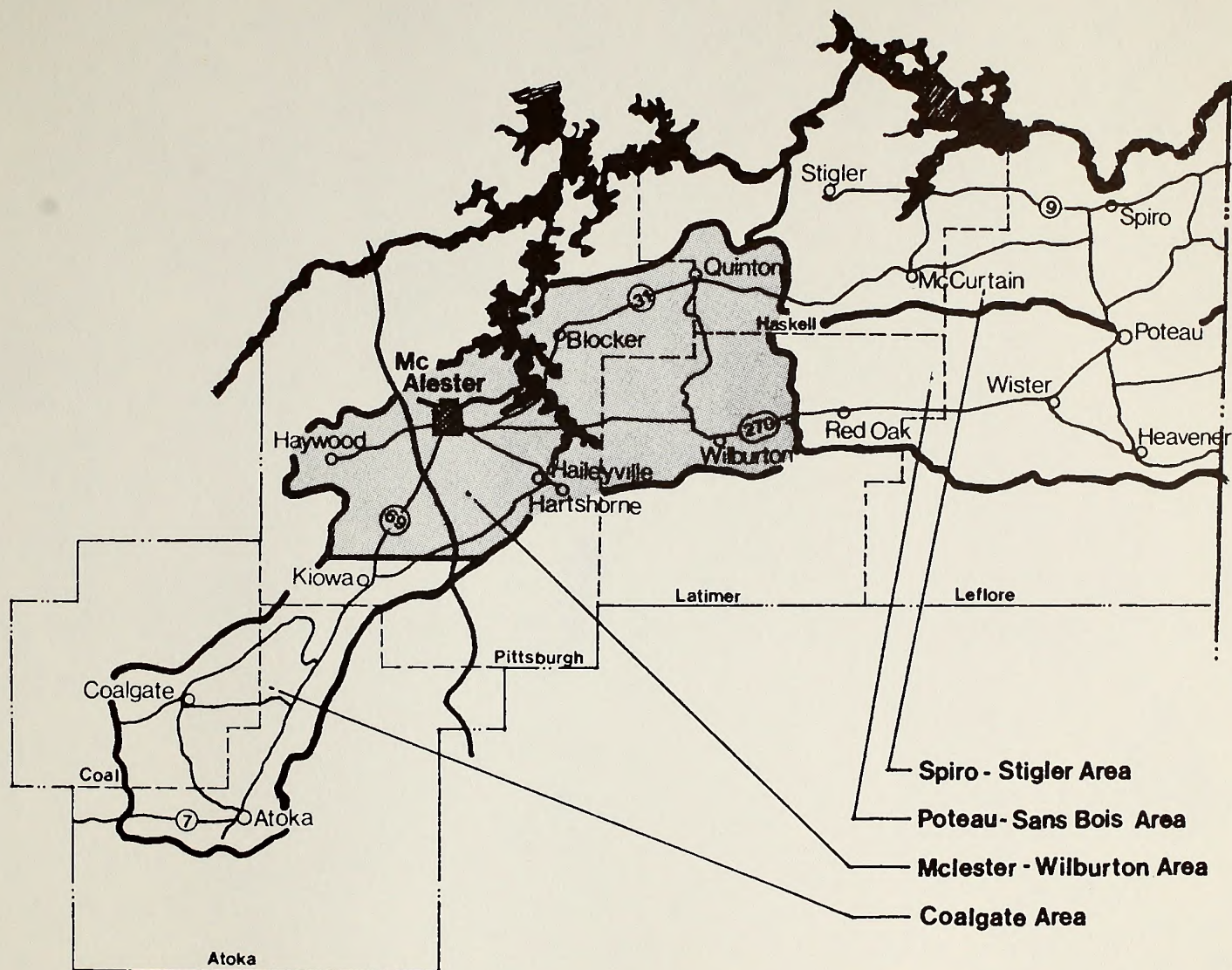


Coalgate Area

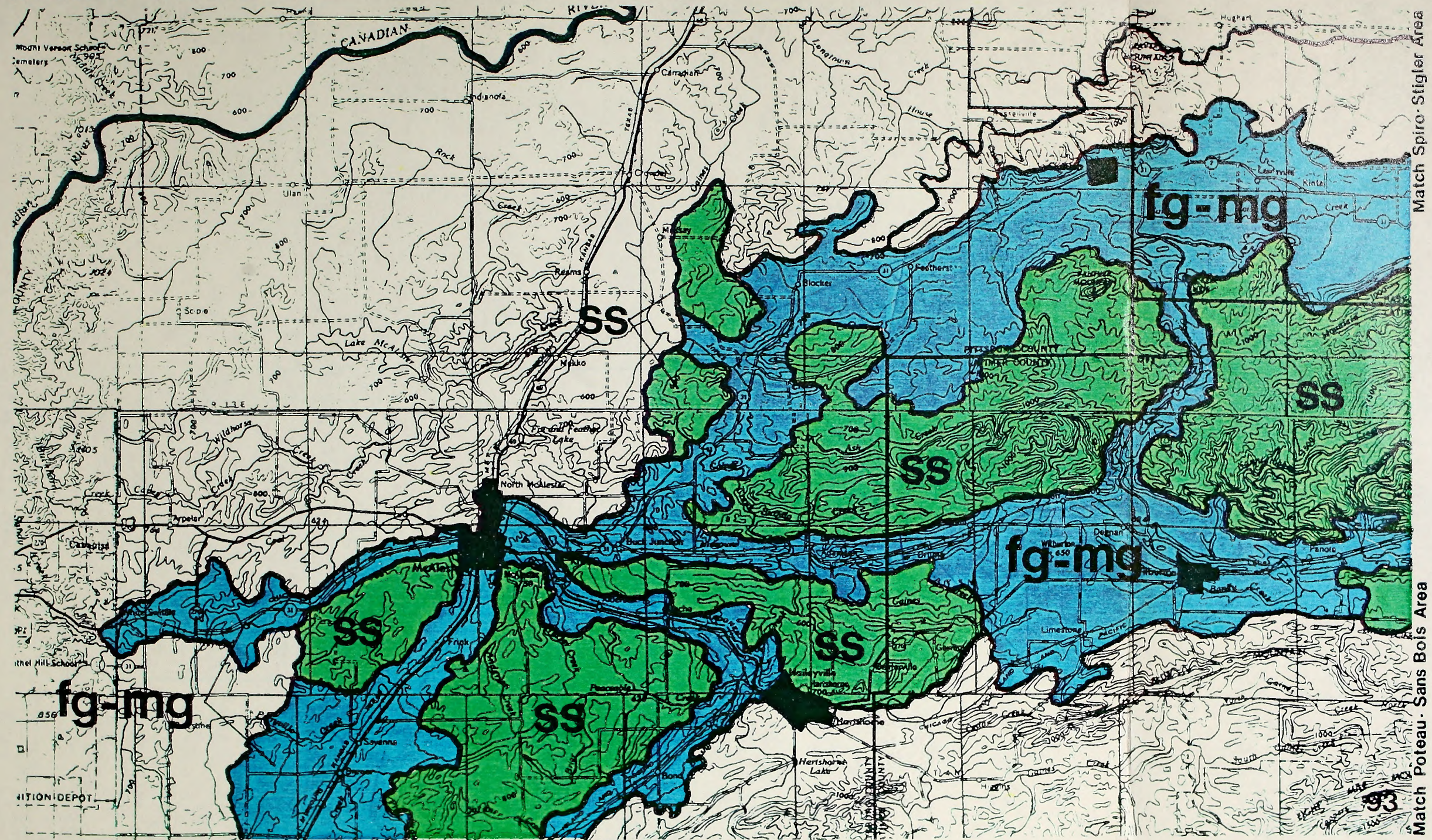




Blue Creek south of Haileyville, Oklahoma



McAlester-Wilburton Area

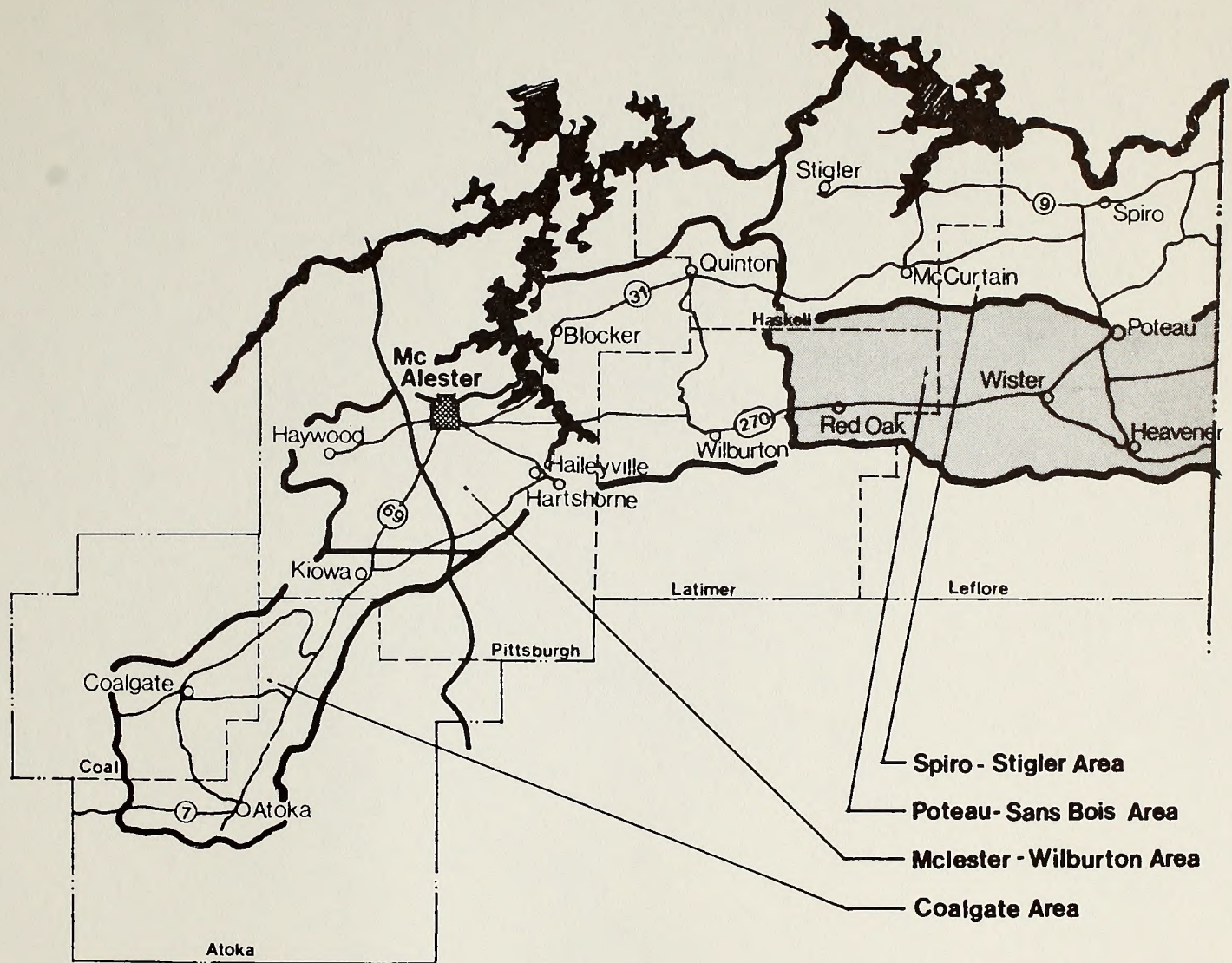


Match Coalgate Area

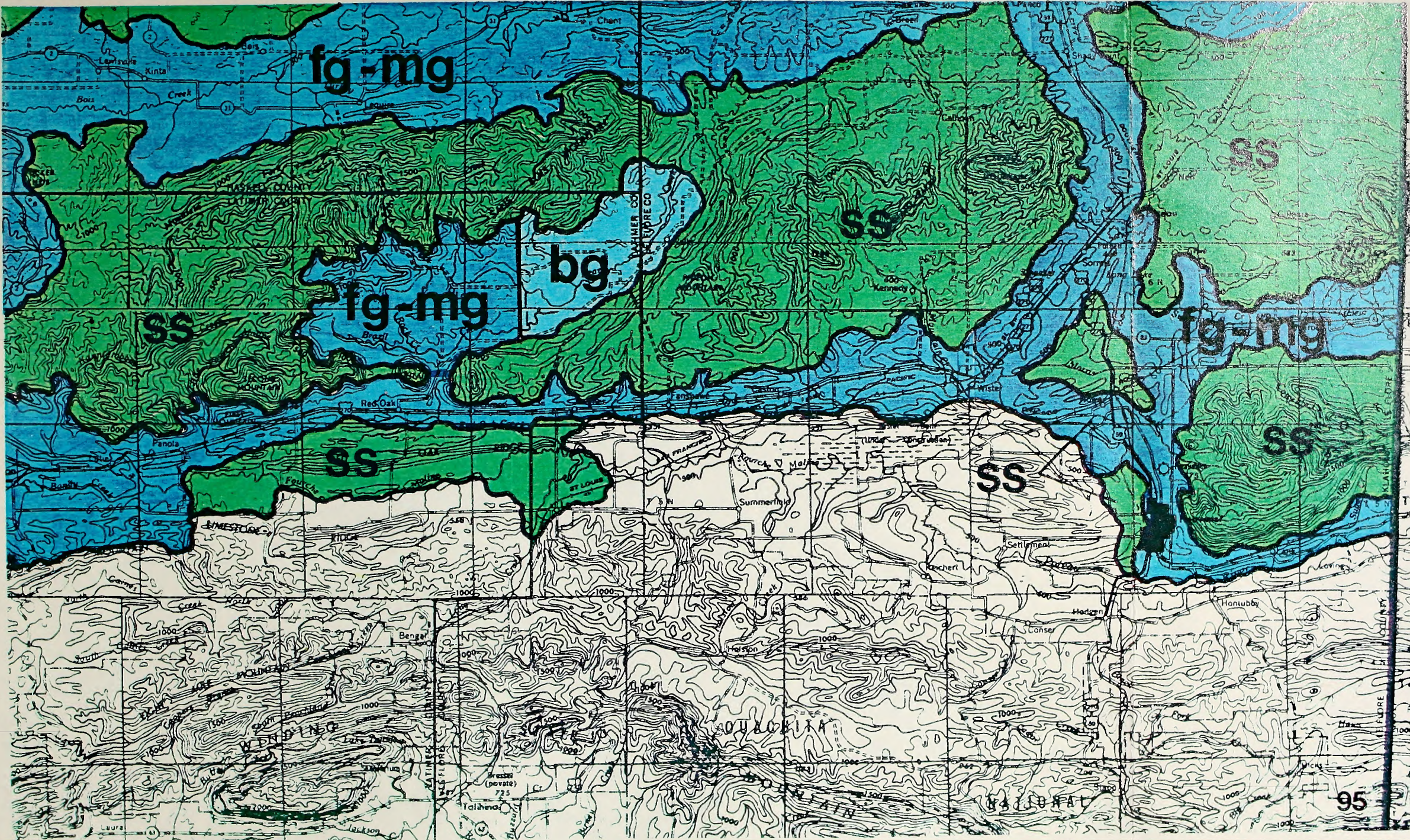
Match Poteau-Sans Bois Area

Match Spiro-Stigler Area

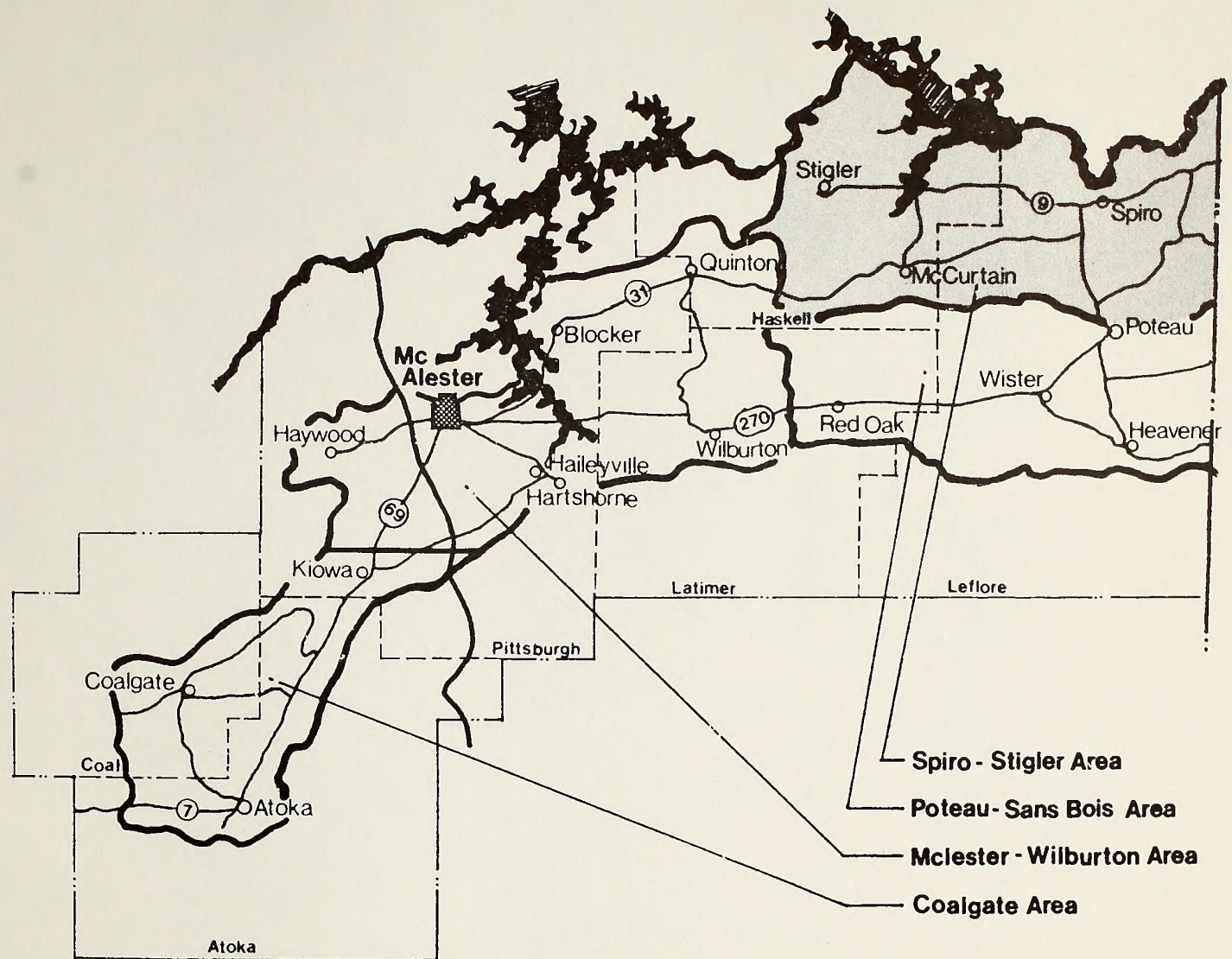
Poteau-Sans Bois Area

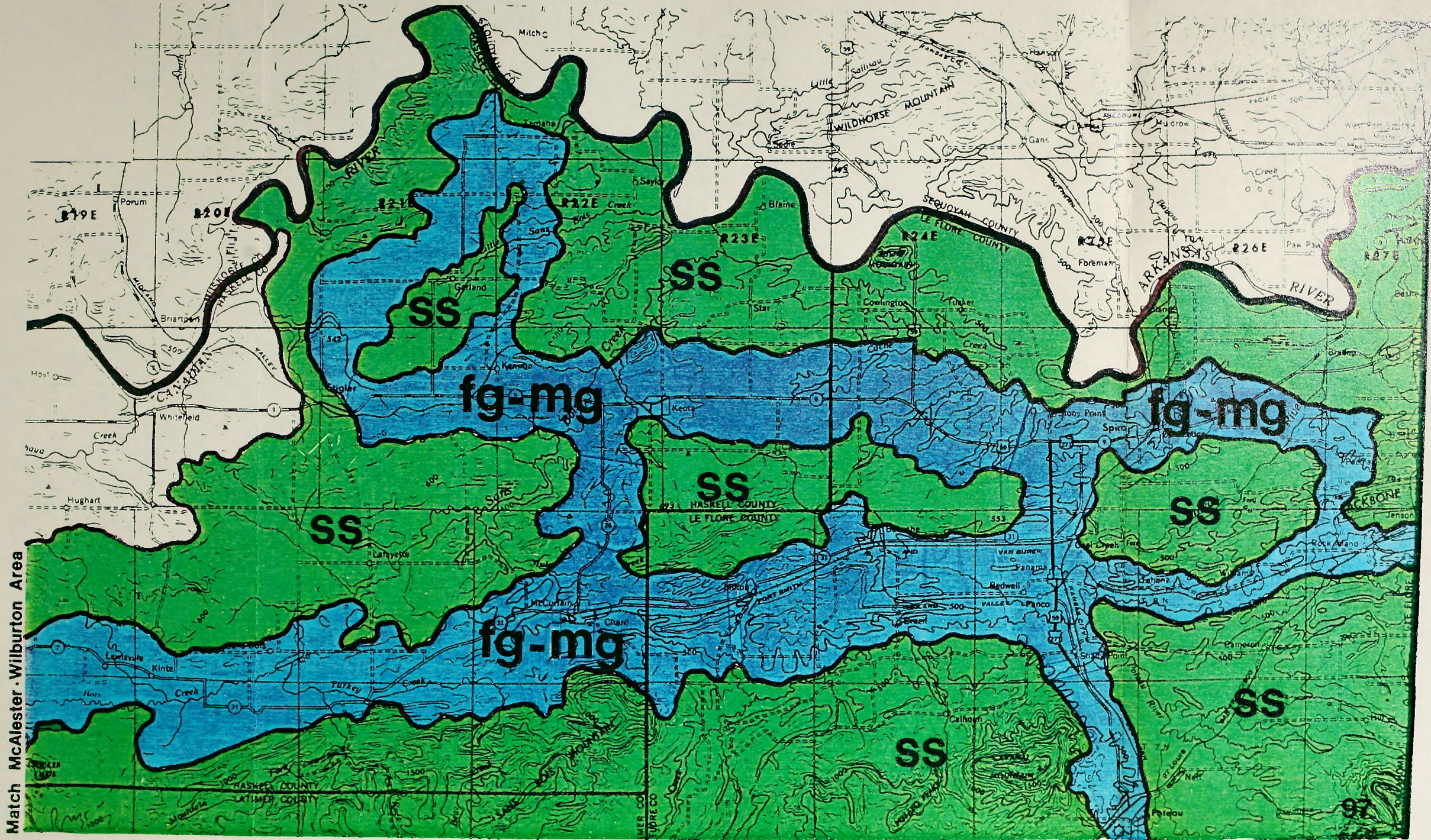


Match McAlester-Wilburton Area



Stigler · Spiro Area





Section IV

Visual Resource Management Classes



Farm building south of Haileyville, Oklahoma

V. R. M. Classes

Visual resource management classes are a combination of the three previous sections: Scenic quality, sensitivity levels, and visual zones. The matrix will illustrate the process used to delineate V.R.M. classes.

Matrix

		Sensitivity Levels					
		high		medium		low	
special areas		I	I	I	I	I	I
Scenic Quality	A	II	II	II	II	II	II
	B	II	III	IV	III	IV	IV
	C	III	IV	IV	IV	IV	IV
Visual Zone		fg mg	bg	ss	fg mg	bg	ss

Example: An area of B scenery, medium sensitivity in the foreground-middleground zone is a Class III management area. (shaded area)

Management Objectives

The management classes indicated in the following section are used as tentative minimum management objectives for visual management units identified. Each class identifies a degree of modification allowed in the basic elements of the landscape. The objective is to retain the primary character of the landscape regardless of the degree of modifications allowed.

The basic provisions of the classes for specific recommendations are as follows: ¹

CLASS I

This class provides primarily for natural ecological changes; however, it does not preclude very limited management activity. Any contrast created within the characteristic environment must not attract attention. It is applied to wilderness areas, some natural areas, wild portions of the wild and scenic rivers, and other similar situations where management activities are to be restricted.

CLASS II

Changes in any of the basic elements (form, line, color, texture) caused by a management activity should not be evident in the characteristic landscape. A contrast may be seen but should not attract attention.

CLASS III

Contrasts to the basic elements (form, line, color, texture) caused by a management activity may be evident and begin to attract attention in the characteristic landscape. However, the changes should remain subordinate to the existing characteristic landscape.

CLASS IV

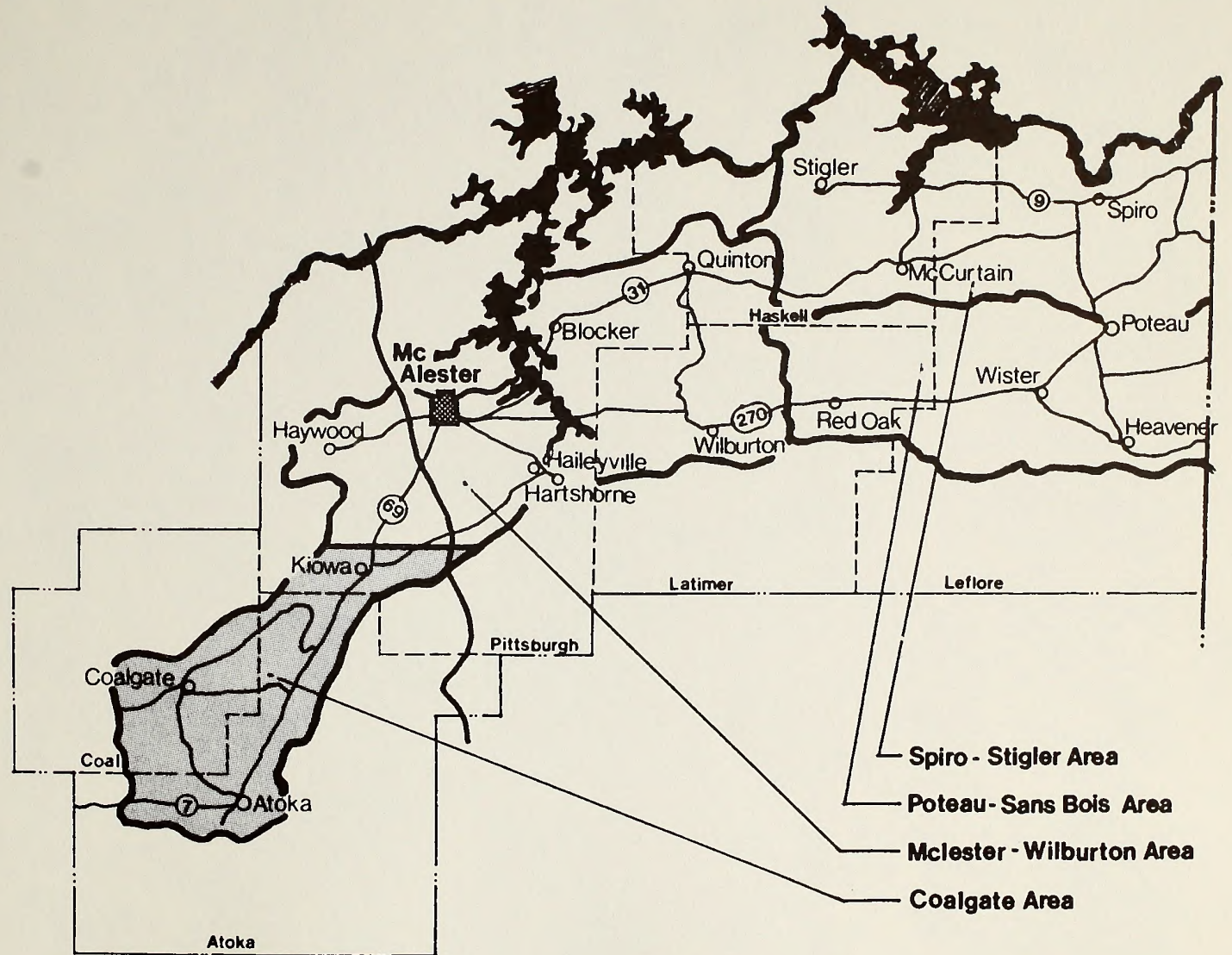
Contrasts may attract attention and be a dominant feature of the landscape in terms of scale; however, the change should repeat the basic elements (form, line, color, texture) inherent in the characteristic landscape.

CLASS V

Change is needed or change may add acceptable visual variety to an area. This class applies to areas where the naturalistic character has been disturbed to a point where rehabilitation is needed to bring it back into character with the surrounding landscape. This class would apply to areas identified in the scenic evaluation where the quality class has been reduced because of unacceptable cultural modification. The contrast is inharmonious with the characteristic landscape. It may also be applied to areas that have the potential for enhancement, i.e., add acceptable visual variety to an area/site. It should be considered an interim or short-term classification until one of the other VRM class objectives can be reached through rehabilitation or enhancement. The desired visual resource management class should be identified.

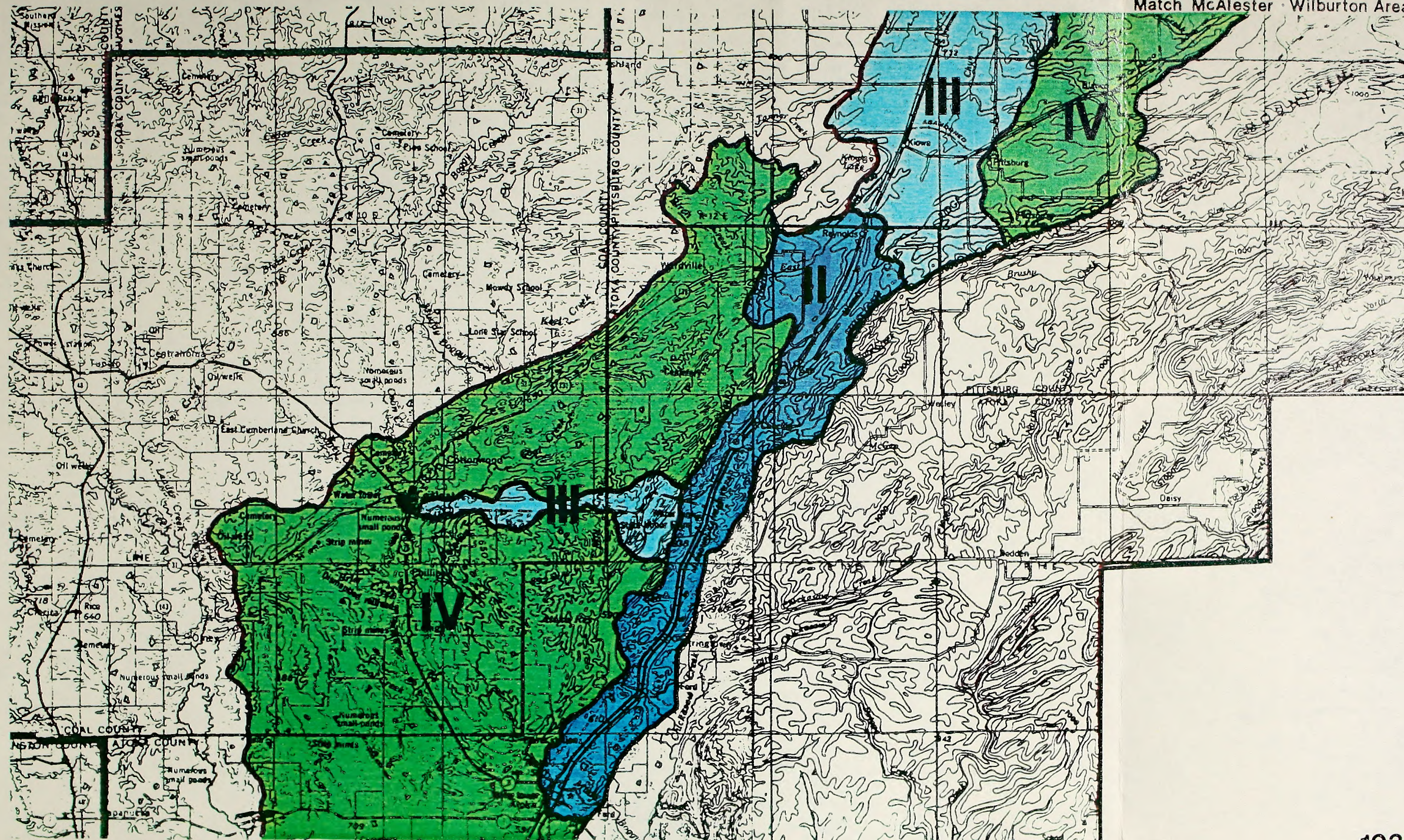
¹ B.L.M. Manual 8411.6 - C1, 3, 4, 5, 6

Coalgate Area

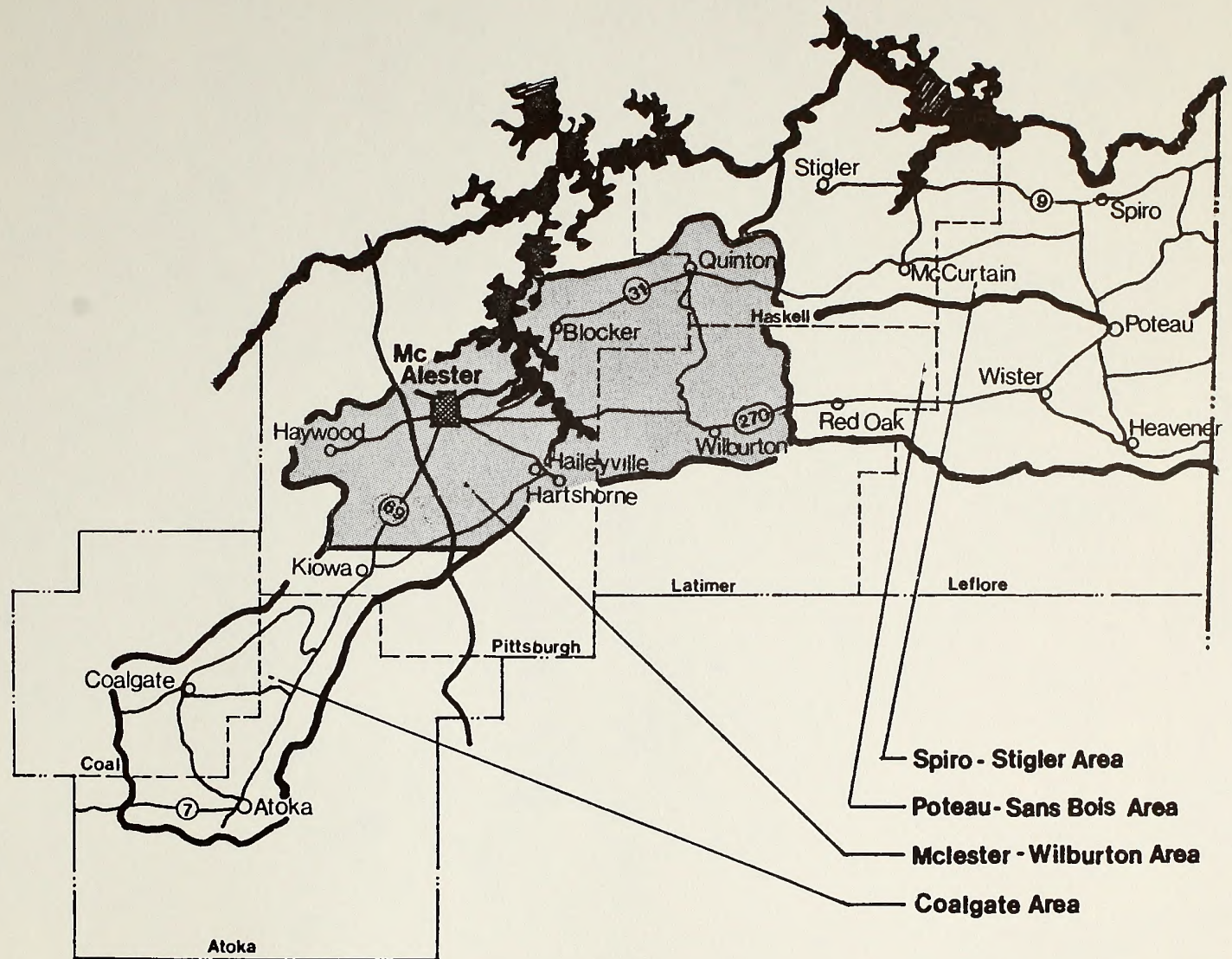


Coalgate Area

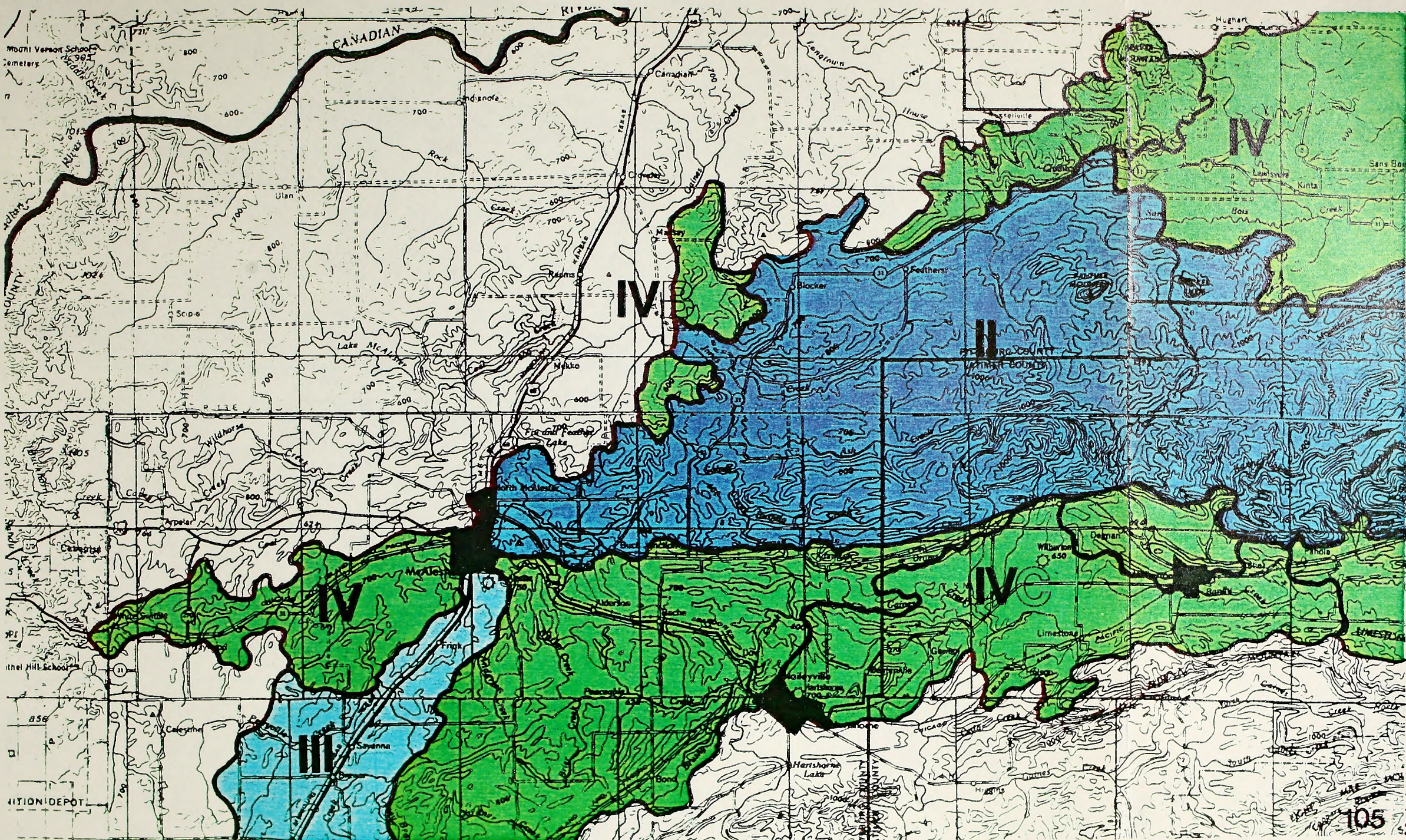
Match McAlester - Wilburton Area



McAlester-Wilburton Area



McAlester-Wilburton Area

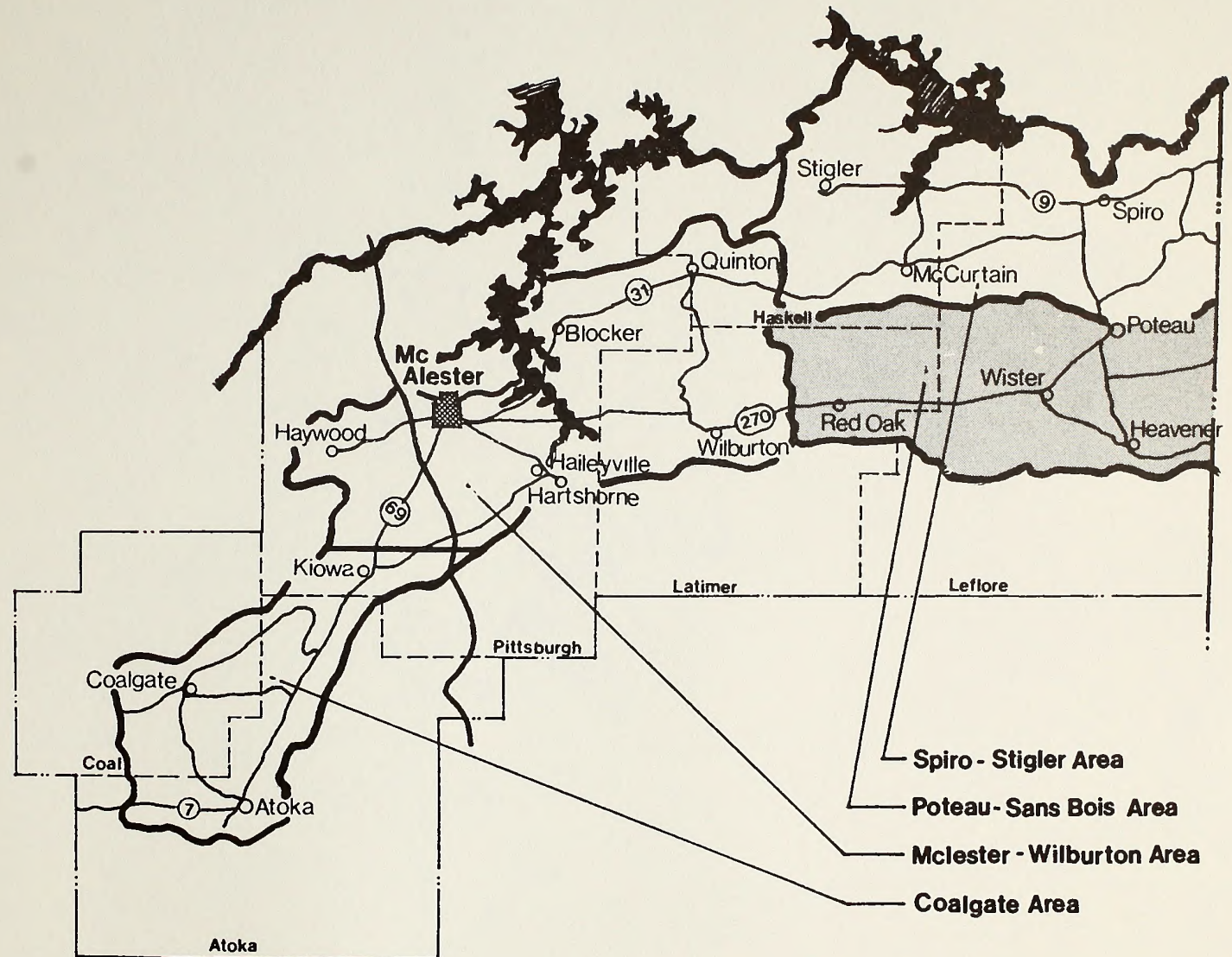


Match Spiro-Stigler Area

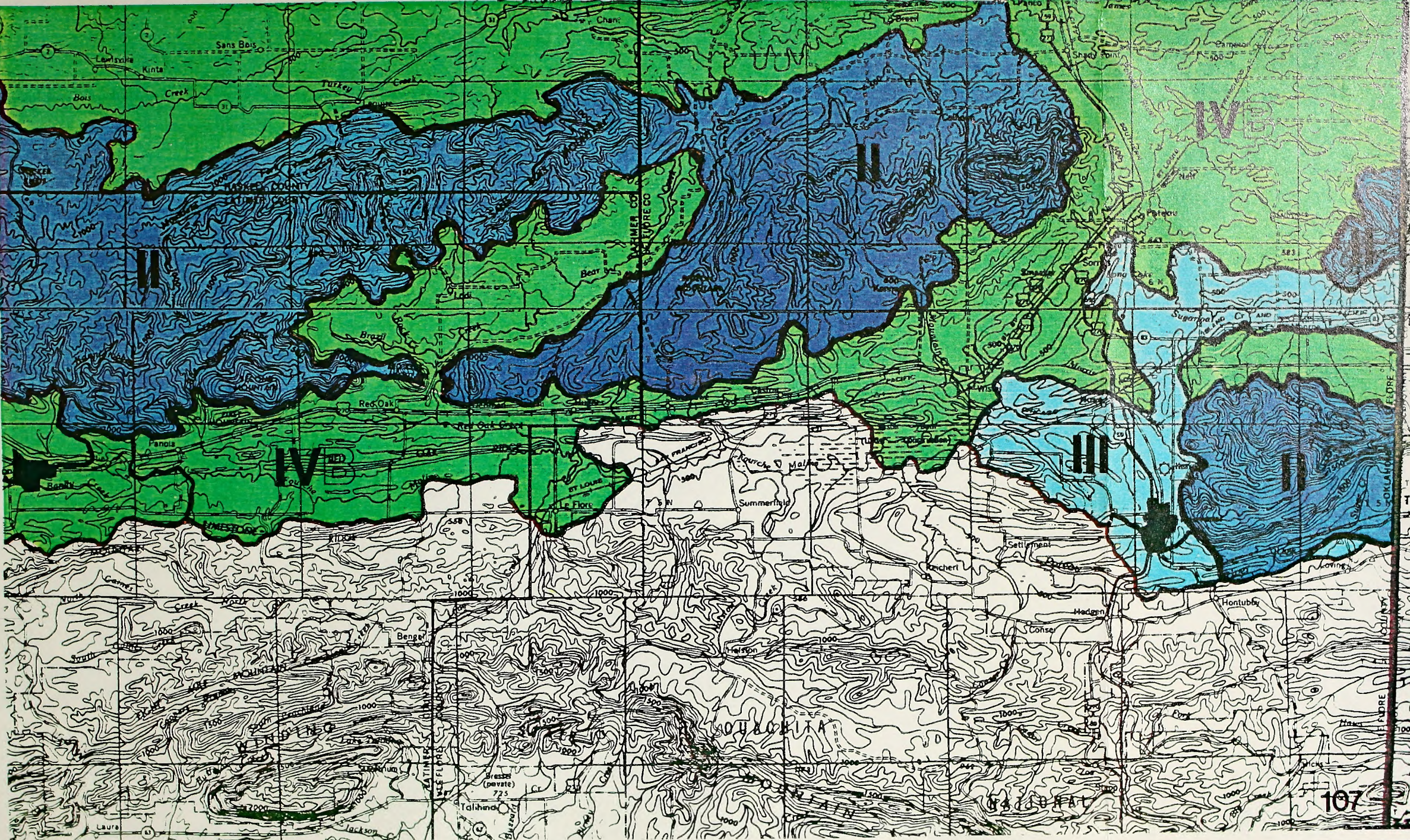
Match Poteau-Sans Bois Area

Match Coalgate Area

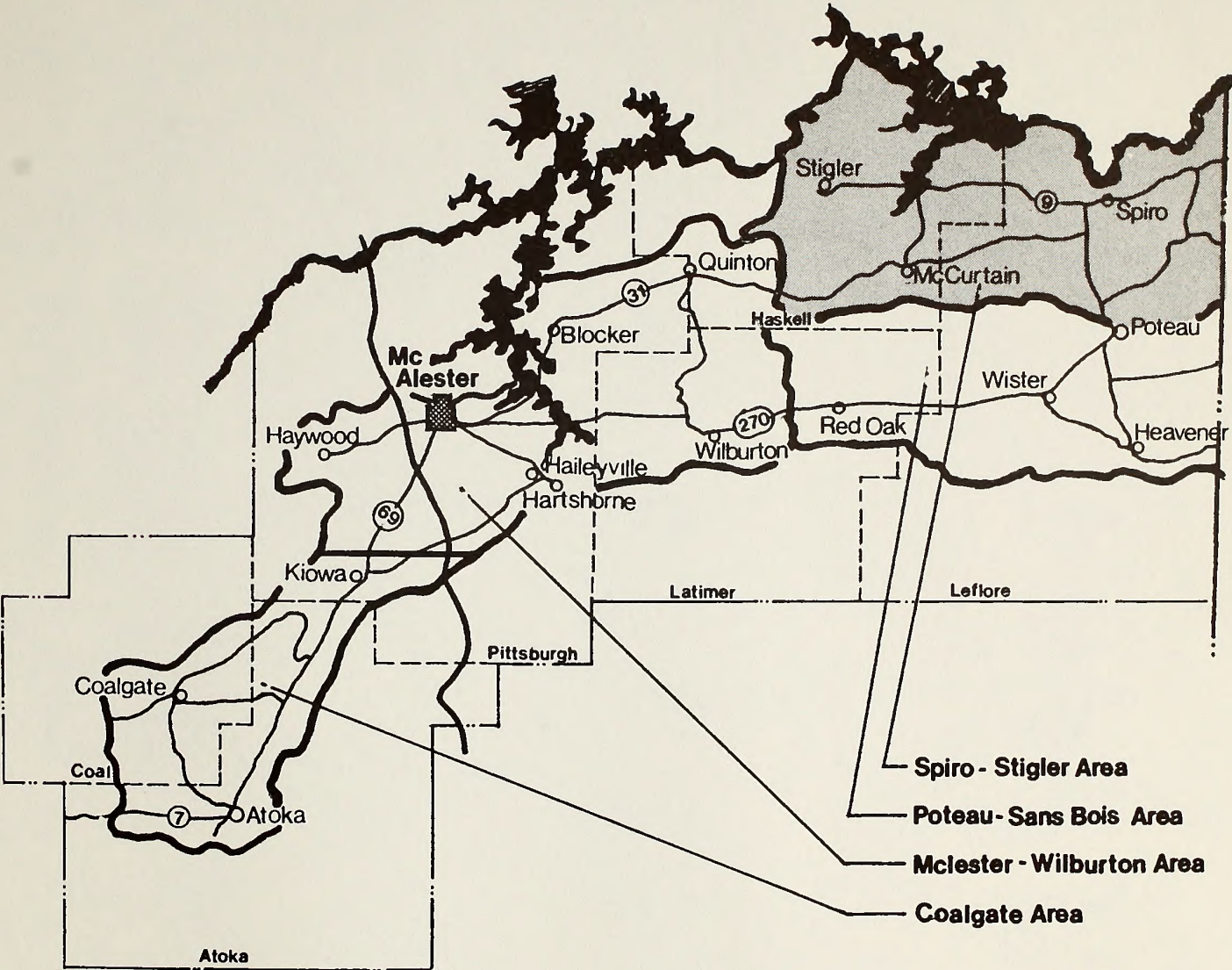
Poteau-Sans Bois Area



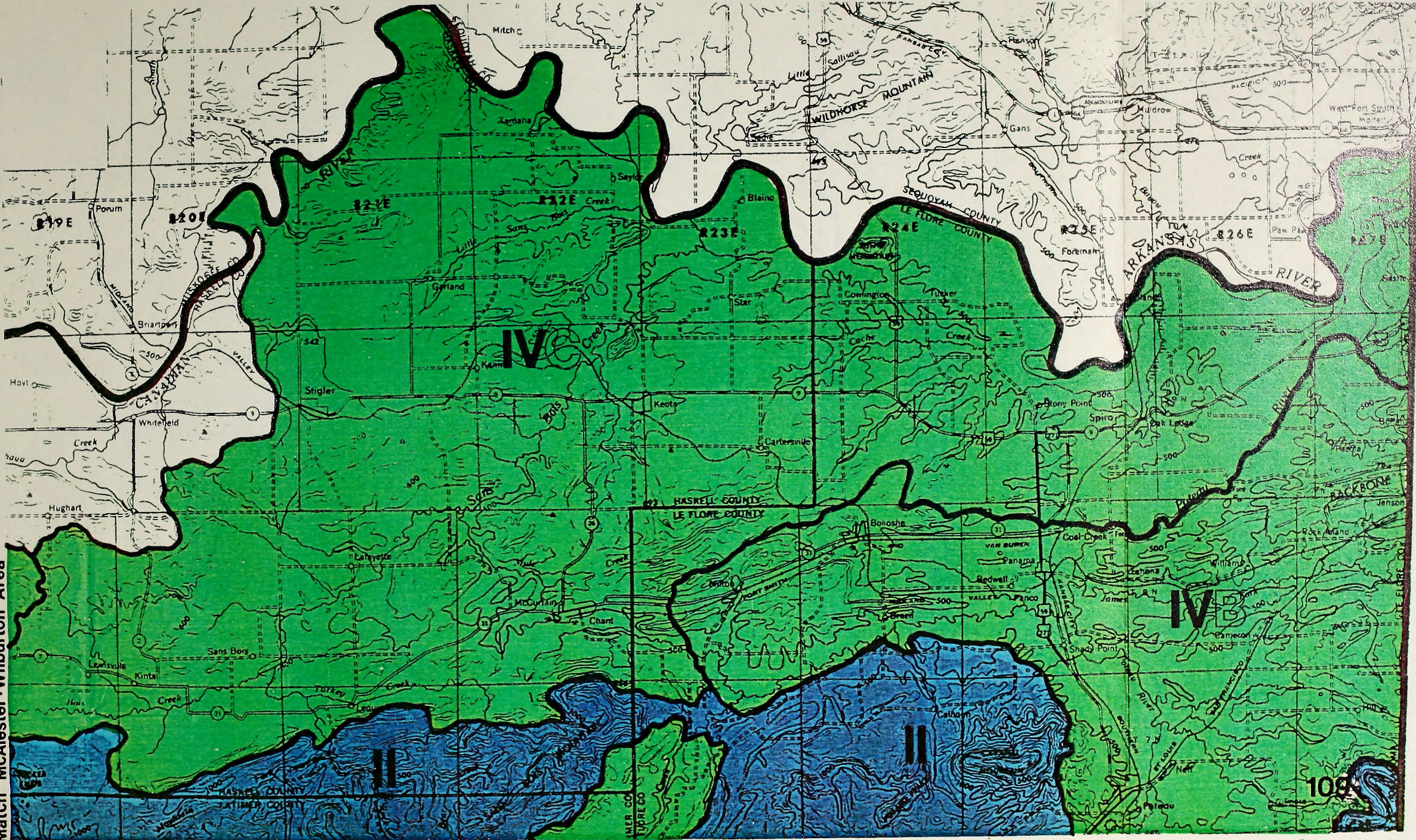
Match McAlester · Wilburton Area



Stigler · Spiro Area



Stigler · Spiro Area



Match McAlester · Wilburton Area

Match Poteau · Sans Bois Area

Section V

Cultural Modifications

Cultural Modifications and Associated Contrast Rating

The inventory process for evaluation and analyzation of cultural modifications is to identify and rate the intrusion. If the rating of the intrusion does not meet the qualifications of the designated management class, then action has to be taken to upgrade the intrusion to meet the criteria of the management class.

The Bureau of Land Management owns only a minute portion of land within Oklahoma. This limits the Bureau's surface management responsibilities throughout the State of Oklahoma.

The responsibility of the Bureau of Land Management within the study area is the maximum use of the coal reserves, with a minimal disturbance to the visual resource.

Coal mining activities have in the past and are presently taking place in and around the federal coal

reserves. The abandoned strip mines and their overburden and the active coal mines give excellent examples of what strip mining does and what the impact of those mines will be on the visual resources in the future.

This report will analyze active strip coal mines with the use of the Cultural Modification Inventory and associated Contrast Rating. After an examination of active strip mines, a comparison of natural reclamation of abandoned strip mines in approximated time frames will be analyzed.

The two active coal mines used as examples are not the only active coal mines on the coal reserve lands. The Garland Coal Company Mine is an active mine located northeast of Stigler, Oklahoma. The Paul Reese Mine is a dormant mine east of Bokoshe. The Bokoshe Strip Mine and the Lonestar Starlight Mine were determined as good examples for Cultural Modification and Contrast Rating because of the high contrast and different mining techniques.

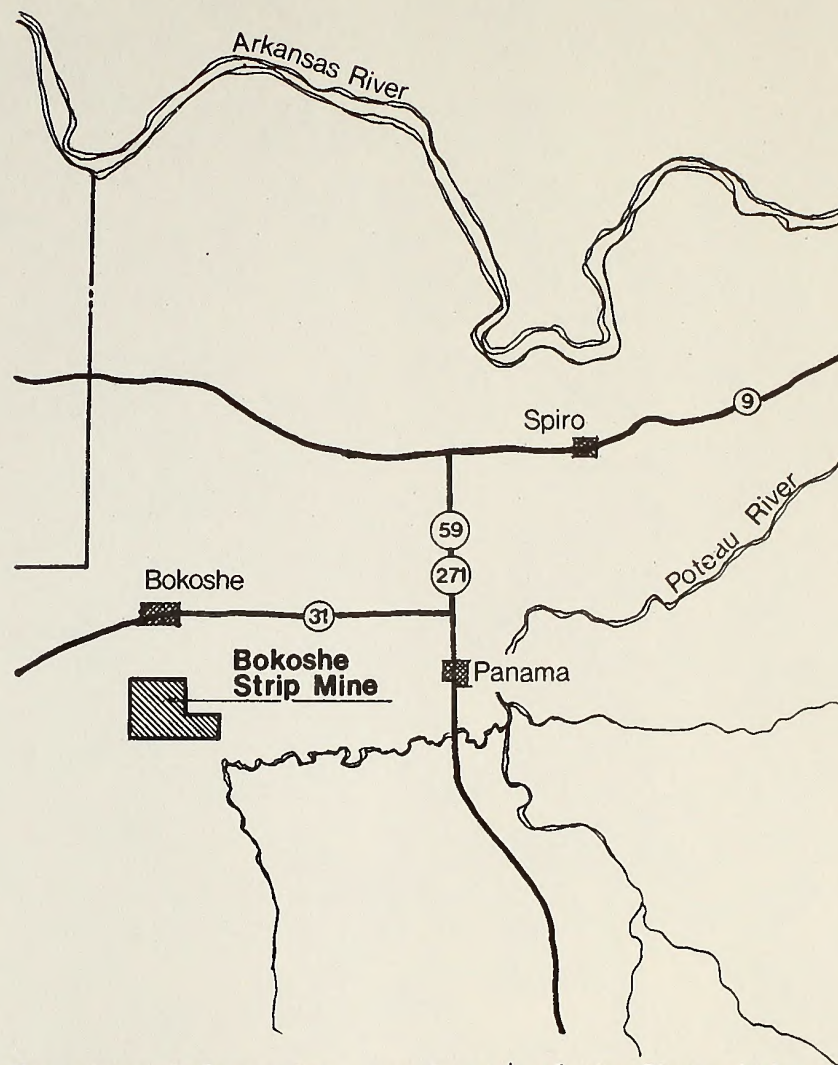
Bokoshe Strip Mine

Bokoshe, Oklahoma

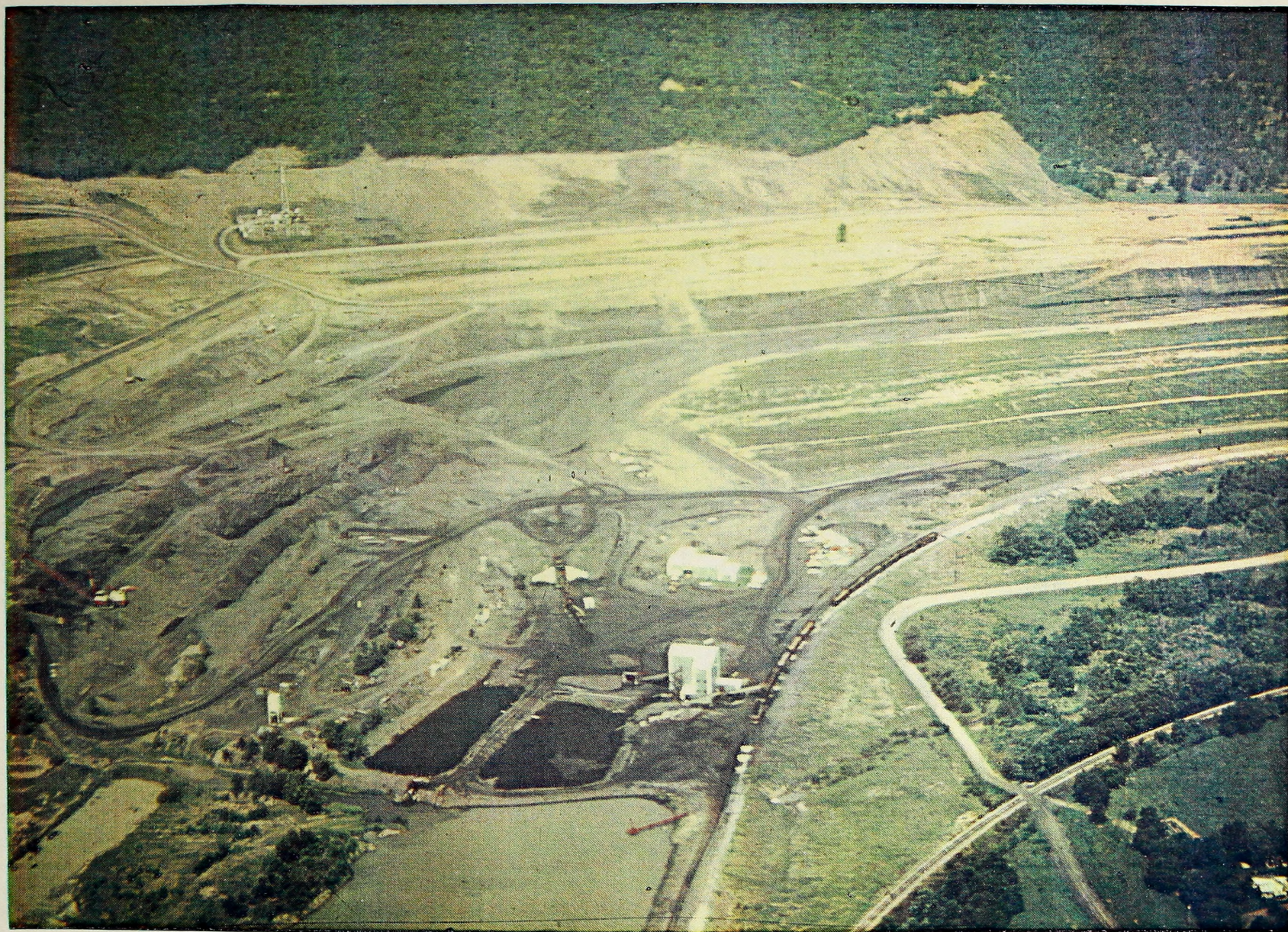
The Bokoshe strip mine is a large strip area south of the small town of Bokoshe, Oklahoma. An active coal and gas mine close to federal coal reserves consumes the bottom and both sides of a small narrow valley. The mine is barely visible from Highway 31 which passes through Bokoshe. Highway 31 is a two lane paved road extending from its junction with Highway 59 and 271 then west through Bokoshe, McCurtain, Eufaula Reservoir and McAlester, Oklahoma.

Location Map

Spiro-Stigler Area



For photo information, see Area 4 of the Photo Index Catalog.



Aerial view of the Bokoshe strip mine. Note revegetated and recontoured areas.

Bokoshe Strip Mine · Modification No. 001

The Cultural Modification Inventory and associated Contrast Rating is provided to identify an intrusion whether positive or negative influence on the landscape. The Bokoshe mine is a negative influence on the scenery because of the severity of the alteration on one or more features of the landscape. In the case of Bokoshe, vegetation is the most evident change in the scenery. The degree of contrast to the existing scenery is termed high due to contrast in color from green vegetation to the brown soil color.

The necessity for identifying a negative existing modification is to determine whether the intrusion can be modified to meet the management designation of the V.R.M. class in which it is located. In the case of the Bokoshe mine, it is felt the alteration to the vegetation can be eliminated by a revegetation program. The landform of the mine area has not been severely altered or it is in a landform reclamation process at the same time the mine is producing. With landform being regraded and the great amount of moisture in the area, the potential for successful rehabilitation of the intrusion is high - meaning the vegetation can be easily restored to its natural state and meet management class requirements.

CULTURAL MODIFICATION INVENTORY AND ASSOCIATED CONTRAST RATING

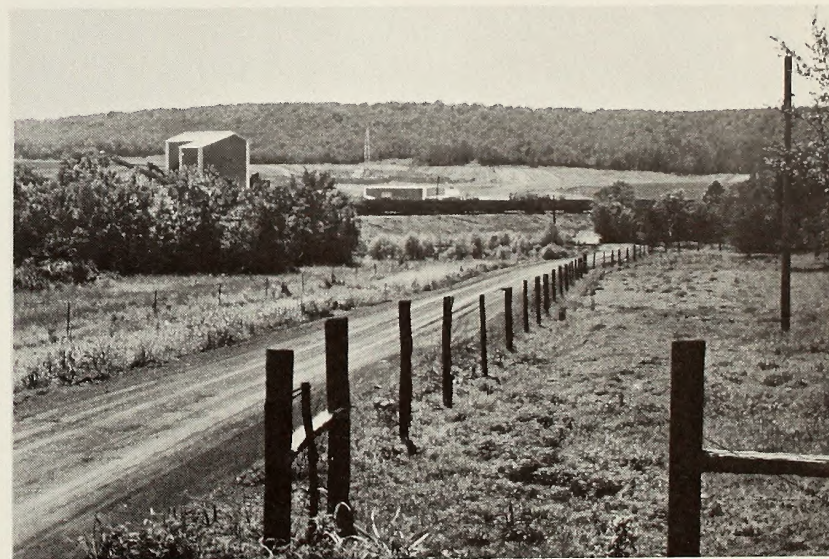
The Bureau of Land Management Visual Resource Analysis · The Environmental Associates Planners

District	Albuquerque	(1) Area	Okla. Proj. Off.	Planning Unit	08	(2) Date	May 29, 1978																								
Scenic Unit	12-08	(3) Photo Reference	Color	Area		Photo																									
Location	Bokoshe, Oklahoma	B & W Area		Photo																											
Name of Modification		Bokoshe Strip Mine, Bokoshe, Okla.		Modification Number		001 (5)																									
Type	(4)	Contrast Rating	(6)	Potential for Rehabilitating	(7)	Potential for Success	(8)																								
1-Landform 2-Vegetation 3-Structure		H-High M-Medium L-Low		M-Modification E-Elimination		H-Fairly certain contrast can be satisfactorily reduced to meet low contrast. M-Difficult to accurately evaluate success, but chances look promising to meet low contrast. L-Probability is low that a change will be made, or success would be limited to meet low contrast.																									
URA III Data				<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> </tr> <tr> <td>0</td> <td>1</td> <td>0</td> <td>B</td> <td>1</td> <td>2</td> <td>1</td> <td>0</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>				1	2	3	4	5	6	7	8	0	1	0	B	1	2	1	0								
1	2	3	4	5	6	7	8																								
0	1	0	B	1	2	1	0																								

Effect on Scenic Quality

The mine as it exists now is an abrupt change in landform and vegetation color. In its working capacity, the pits and structures involved with coal production are an intrusion on the landscape.

As noticed in other older mine areas, the vegetation reclaims the soil quite rapidly. The landform at the Bokoshe mine is being reclaimed at the same time coal is being produced. The landform reclamation will be complete almost as soon.





Bokoshe strip mine as seen from Highway 31.

Lonestar Starlight Mine

McCurtain, Oklahoma

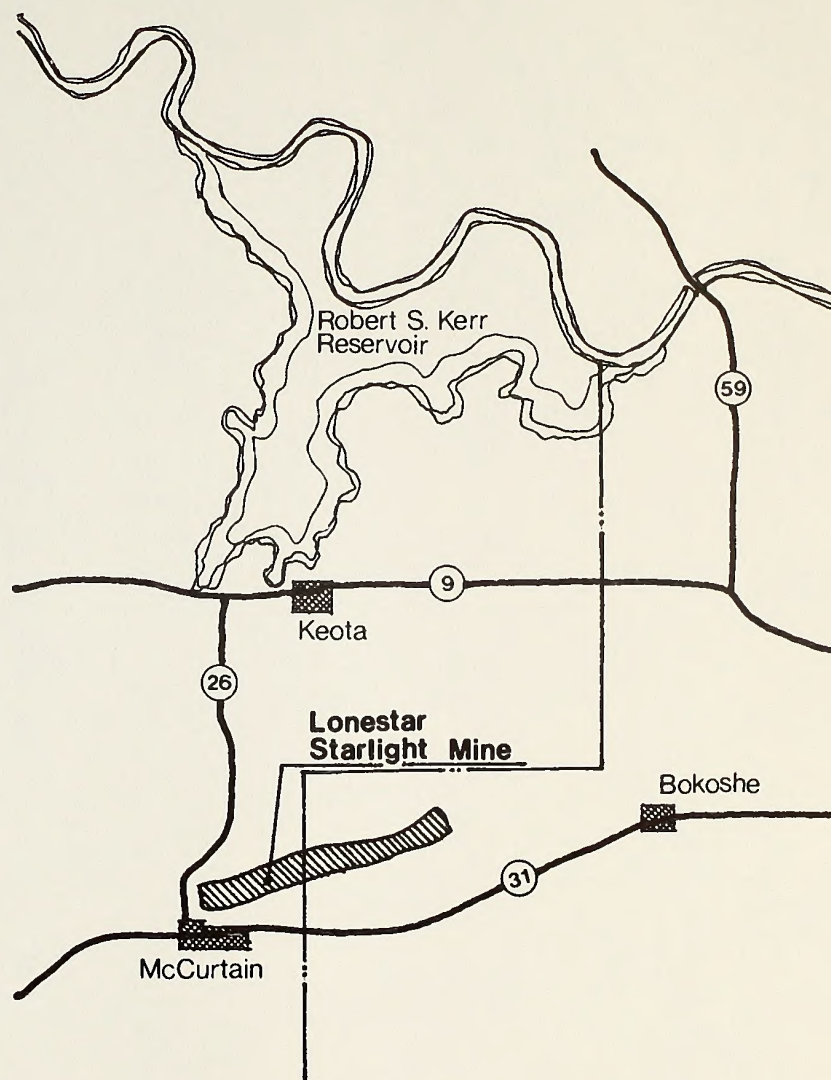
The Lonestar-Starlight Mining Company is presently mining coal from a long narrow strip mine about one half mile north of McCurtain, Oklahoma on Highway 26. From Highway 26, the mine extends east approximately four to six miles and about 400-600 yards wide.

The valley in which the operation is located is a wide, gently rolling valley. Vegetation is mostly grasses and pasture land with scattered clumps of trees in and around the valley floor.

Highway 26 is a two lane paved highway from Keota, Oklahoma and the junction of Highway 9 to McCurtain, Oklahoma.

Location Map

Spiro-Stigler Area





Aerial view of the Lonestar-Starlight Mine

Lonestar Starlight Mine - Modification No. 002

The Lonestar-Starlight Mine is a negative cultural modification of the landscape. The type of feature most severely altered by the mining activity is landform. A high degree of contrast is indicated in the accompanying photographs by the abrupt change in form and color of the land. The steep piles of overburden and color of soil contrast greatly with the low, rolling hills and light green shades of the grasses.

However, the intrusion has the potential for total elimination. The overburden from the strip areas already exhausted have been graded to match the adjoining natural landform. The overburden is revegetating; thus the contrast at the time of the survey has been drastically reduced. As indicated by ongoing reclamation procedures, the success of the landform contrast being satisfactorily reduced to meet low rating criteria, or totally eliminated, is high.

CULTURAL MODIFICATION INVENTORY AND ASSOCIATED CONTRAST RATING

The Bureau of Land Management Visual Resource Analysis - The Environmental Associates Planners

District Albuquerque 01 (1) Area Okla. Proj. Off. Planning Unit 08 (2) Date May 30, 1978
 Scenic Unit 12-08 (3) Photo Reference Color Area Photo _____
 Location Lone Star-Starlight Mine McCurtain B & W Area _____ Photo _____

Name of Modification <u>Lone Star-Starlight Mine</u>		Modification Number <u>002</u> (5)	
Type (4)	Contrast Rating (6)	Potential for Rehabilitating (7)	Potential for Success (8)
1-Landform 2-Vegetation 3-Structure	H-High M-Medium L-Low	M-Modification E-Elimination	H-Fairly certain contrast can be satisfactorily reduced to meet low contrast. M-Difficult to accurately evaluate success, but chances look promising to meet low contrast. L-Probability is low that a change will be made, or success would be limited to meet low contrast.

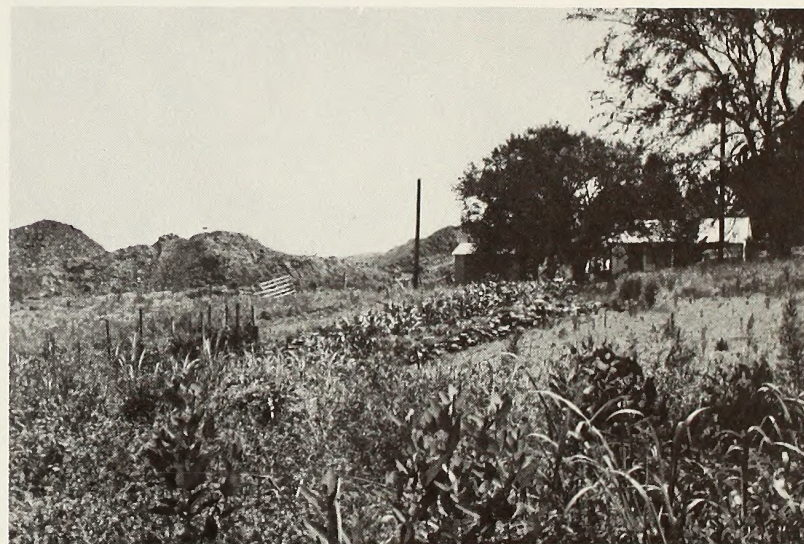
URA III Data

1	2	3	4	5	6	7	8
0	1	0	8	1	2	1	0

Effect on Scenic Quality

The overburden piles are a very abrupt change in the surrounding landform. The soil color changes the color of the surrounding vegetation as abruptly as the landform.

The deep pits of the strip mine provide excellent lakes for livestock and fish production which should be complimented by recontouring the overburden. This type of reclamation is noticed to enhance the scenic quality following the closure of the mine operation.





Lonestar-Starlight Mine as seen from Highway 26 outside of McCurtain, Oklahoma.

Cultural Modifications—Comparative Analysis

The modifications made to the landscape by strip mining or coal related activities are noticeable landform contrasts. Prior to surface mining regulations, most overburden piles were left in conical heaps and excavation pits were left as is and filled with water.

The final section of this report will be a brief summary to illustrate the severity in contrast of strip mines and how natural vegetation has reclaimed numerous overburden piles and mine pits and reduced their impact on the scenery quality of the region.

The two cultural modification inventories illustrate what is presently happening at the Bokoshe and Lone-star-Starlight Mines. From overhead and ground level observations, the two operations seemed to be reducing the impact of the mine on the landscape while at the same time producing the coal product. Though the modification of the landscape is severe, it must be realized that it is only temporary. For example, at the Bokoshe mine, photographed from Highway 31, the exposed earth color contrasts greatly with the existing green vegetation. However, landform of the cut is contiguous with surrounding hills. Thus with natural or induced revegetation, the brown scar seen from the highway would soon be a light green, grassy hillside adding contrast and interest to the darker green forest colorations. It is evident from this example that attempts are now being made to reduce the impact of modifications to the landscape brought about by the mining of coal.

As mentioned before, active coal strip mines are a high contrast in relationship to the surrounding landscape. However, inactive strip mines in the form of overburden piles and pits are also modifications to the landscape. Not all older strip mines are a negative factor to the scenery quality. Some older mining areas offer scenic and recreation potential in the form of lakes and ponds surrounded by gentle interesting landforms and thick green vegetation growing to the waters edge.

The mines illustrated in the following pages are broken into these categories:

- 1) 1978 - 1970
- 2) 1970 - 1960
- 3) Prior to 1960

Within the three categories, photographs are used to illustrate the severity in contrasts of landform, vegetation and color. The photographs are also used to indicate the positive modifications to scenery quality, recreation potential, and natural vegetation reclamation.

Comparative Category No. 1

This category is an approximation of active coal production mines between the years 1978 to 1970. The assumption of this time frame is based on the observation of plant life, i.e., the size and density of the growth or the amount of soil covered by native grasses.

These assumptions are made in lieu of ecosystems which contribute to the rapidity of revegetation.

The examples are taken from the Hazelton Mine located west of Coalgate, Oklahoma and the Lehigh Mine south of said town. These two strip pits indicate the rapidity of plant growth in a relatively short time period.



The overburden piles of the two mine areas are grown over with grasses. However, some areas of soil are still exposed.

With vegetation just beginning to get a good start in the soil, the noticeable intrusive factor is evident in the abrupt landform change. The conical shaped mounds, even though green, are an abrupt contrast to the rolling landform of the surrounding countryside.

The lakes and ponds seem to be an advantage to the people living in the area. In some cases, they serve as fishing areas, stock watering ponds, or recreation areas.





Overburden piles with natural grass revegetation. Note the few trees and their small size.



Overburden piles are not completely covered with natural grass revegetation.

Comparative Category No. 2

This category is assumed to be strip mines active between the years 1970 and 1960. The examples are taken from a strip area on Highway 9 near the junction of Highway 59 north of Cowlington, Oklahoma and a strip area near Garland, Oklahoma north of Stigler, Oklahoma.

In both the examples little grass vegetation covers the overburden piles, but trees growing from the piles themselves are quite large and tend to soften the steepness and incongruity of the landforms.



Here again, landform is the main contrast created by the strip mines. However, natural tree growth is up to heights where the piles begin to blend with the surrounding landscape from the form and line created by the vegetation.

This example points out quite distinctly the importance of regrading the landforms caused by strip mining to blend with surrounding natural terrain. With the regrading, accompanied by natural or man induced revegetation, the visual quality in and around strip mines is increased.





Overburden piles are still visible. Note the natural tree vegetation lessens the abrupt landform alterations.



Overburden piles are still very visible. Note the natural tree growth.

Comparative Category No. 3

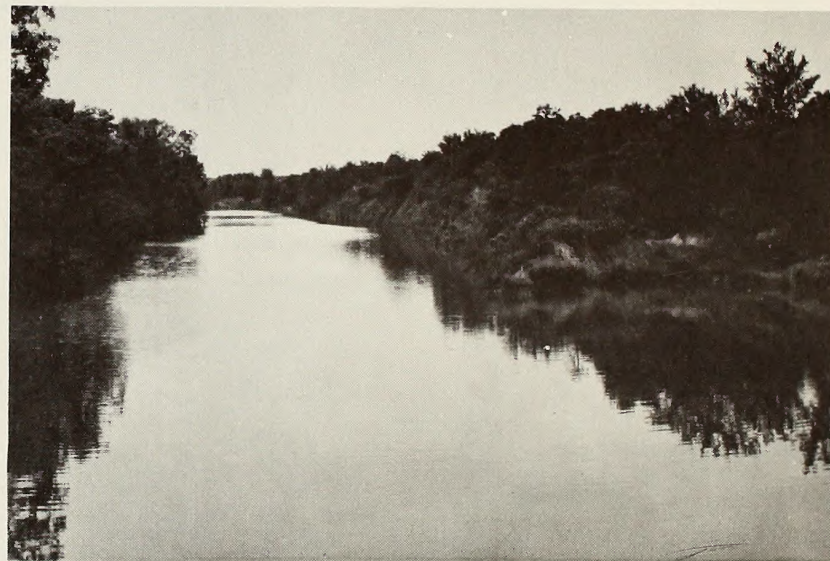
This category is a brief look at mine areas prior to 1950. These examples are taken from a strip pit west of Wilburton, Oklahoma near the small town of Degran and a strip area on a dirt road south of Tamaha, Oklahoma.

The mines show an almost total overgrowth of native vegetation which in turn hides the overburden piles completely.



The lakes and ponds filling the mine pits add to the scenic quality and make the area quite picturesque.

If time is not of the essence, then strip mines could be totally abandoned leaving overburden piles in their steep conical form to be naturally reclaimed in 20 years by the native vegetation. However, initially eliminating the intrusive landform reduces the time it would take for vegetation to reclaim the overburden areas.





Overburden piles are, for the most part, unnoticeable. Note the large tree growth and positive water element.



Only the steep banks on the waters edge show the existence of strip mine. Natural revegetation totally hides overburden.

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